

Report of the Deputy Leader

This report summarizes the progress and success already achieved in improving energy efficiency across the organisation, saving money and reducing CO₂ emissions. Successful energy efficiency measures installed to date are estimated to save nearly £275,000 each year and further projects are in progress.

National Indicator -NI 185

For several years now, as part of the Local Area Agreement, the County Council has been working towards a 4% reduction in CO₂ emissions by April 2011¹, and has set a longer term target of 8% by 2013 in the Corporate Plan.

Although we are still awaiting guidance from DECC in relation to national indicators I can report that excellent progress has already been made. The table below shows that the CO₂ emissions for 2009/10 were 43,760 which equates to a **9.6%** reduction against the 2008/9 baseline of 48,418 t CO₂ which puts us ahead of our 4% target.

NI 185 Emissions Breakdown 2009/10

Emissions source	Tonnes CO₂	% of baseline
Electricity	23,023	52.6
Gas	13,565	31
Oil	3,089	7.1
Vehicle fleet	2,110	4.8
Business mileage	1,973	4.5
Total	43,760	100

Emissions from energy use in school buildings accounts for 56% of the total baseline. As such, we are focussing the Sustainable Schools programme on energy efficiency.

Schools Emissions Breakdown 2009/10

Emissions source	Tonnes CO₂	% of schools baseline
Electricity	10,700	43.7
Gas	11,339	46.3
Oil	2,465	10
Total	24,504	100

In order to achieve these targets the County Council secured £1.1 million funding from Salix Finance (an independent company funded by the Carbon Trust) which was matched by BCC's own £1.1 million Energy Efficiency Fund to create a £2.2 million ring fenced Salix Loan Fund.

Both Corporate buildings and nearly 200 schools will have been surveyed to identify where the best energy savings can be made to help reduce energy costs to BCC and schools.

The Salix Loan Fund is the key funding mechanism for the Carbon Reduction Programme. Salix funding is used to pay for energy saving measures to be implemented across the organisation. The loans are interest free and the calculated energy bill savings are then used to repay the loan. Once repaid, this money then becomes available to fund further projects across the property estate.

Typical projects include improvements such as installing loft and cavity wall insulation, lighting upgrades, pipe lagging and Building Energy Management Systems (BEMs) along

¹ based on a 2008/9 baseline

with high profile projects with Transportation colleagues such as LED traffic signals and energy efficient streetlighting.

The table below shows the number of projects implemented to date.

Salix Project Type	Committed & completed	Pipeline
BEMS	7	1
Cavity/Loft Insulation	27	43
Valve/Pipework Insulation	30	44
IT	1	0
Streetlighting/Traffic Lights	3	0
Lighting	1	7
Heat Distribution	1	4
Voltage Reduction	0	4
Air Conditioning/Cooling	5	0
Total	75	103

Pipeline: Project has been quoted and assessed as compliant, awaiting decision to proceed.

Last year I reported a successful start to the programme with 17 projects committed and completed resulting in an annual CO₂ reduction of 729 tonnes with estimated annual revenue savings of £139,427. I am delighted to report that there are now 75 projects completed or underway with a further 103 in the pipeline. Projects implemented to date are estimated to save £274,943 each year across BCC and Schools.

The table below shows the split between corporate and school buildings.

2009/10	Total Committed/ Commissioned	Total Energy £ saved pa Committed/ Commissioned	Total CO2 saved pa Committed/ Commissioned	CRC Carbon Allowance Cost Avoidance £ (£12/tCO ₂)
Non School	787,613.45	152,061.60	899.04	10,788.48
School	157,312.49	48,425.20	258.47	3,101.70
Total	944,925.94	200,486.80	1,157.51	13,890.18
2010/11	Total Committed/ Commissioned	Total Energy £ saved pa Committed/ Commissioned	Total CO2 saved pa Committed/ Commissioned	CRC Carbon Allowance Cost Avoidance £ (£12/tCO ₂)
Non School	137,360.94	27,964.62	162.96	1,955.52
School	204,933.34	46,491.89	339.05	4,068.54
Total	342,294.28	74,456.51	502.01	6,024.06
Grand Total	1,287,220.22	274,943.31	1,659.52	19,914.24

CRC Energy Efficiency Scheme

This is a new financial instrument which is a mandatory energy savings and carbon emissions reduction scheme for the UK. It is designed to act as an incentive to improve energy efficiency across large private and public sector organisations. The scheme requires participants to purchase carbon allowances at £12 per tonne on CO₂

The recent Government Spending Review announced significant changes to the scheme which will have financial implications for BCC. Under the new scheme, the funds generated by the scheme will no longer be recycled back to participants but will now support government finances.

Using last years energy consumption data it is estimated that this new tax will cost BCC around £500,000. The table above shows that the Salix Programme has already helped avoid approximately £20,000 worth of carbon allowances.

Sustainable Schools

The changes to the CRC Energy Efficiency Scheme will affect schools financially. In order to support schools in their energy and carbon reduction activities a number of programmes are available.

The Eco schools programme has been very successful and the Chairman of the Council has already presented Green Flag awards, the highest award, to several of the local schools which has resulted in positive press coverage for the organisation. By working towards becoming an Eco-School, a school will be taking measures to monitor and reduce energy use and be learning about energy conservation in the curriculum. Over the last year the team ran 34 sessions which helped lead to an increase of 73 awards gained with 37 new schools participating. 46% of the schools are now accredited and 15 have now received the Green Flag award.

BEES (Bucks Energy Efficient Secondary Schools) forum is for site managers, business managers and Eco-school coordinators to learn more about managing their energy use and involving students.

Students from the Buckinghamshire Youth Parliament are being supported to help them promote 'Climate Change Week' and 'Earth Hour' in March 2011. They will be leading assemblies, raising awareness and motivating schools and students at home to take part in energy saving.

Carbon Detectives sessions help teachers understand an online tool developed by Building Research Establishment (BRE) to support schools monitoring and measuring their carbon emissions.

The second Sustainable Schools Conference took place in February 2010 at Green Park. Over 70 delegates attended to hear presentations from DCSF and Ofsted, followed by a choice of 14 workshops and information and advice stands. The next conference is planned for February 2011 with an energy focus.

The Sustainability team are working with a local Buckinghamshire business, Zap Carbon, who are about to launch an energy saving competition in South Bucks and Chiltern. The District Councils have funded the programme in their areas, which includes schools. The challenge will encourage pupils to monitor carbon and reduce electricity consumption at home, competing with other schools and teams.

Summary

There are several other wider sustainability programmes underway across the County Council such as the introduction of paper cup recycling in the Watergarden Café, a pilot scheme to loan out energy monitors to residents through the Libraries, Timber – an EU funded biomass (wood fuel) project and renewable energy assessments. However energy efficiency across the estate has been the priority focus.

This has been a very successful year for the Sustainability Team working across the organisation to help reduce the cost of energy, improve the quality of buildings and helping schools to understand the importance of energy monitoring and carbon reduction.

In these times of financial constraint, it is essential that we continue to do all we can to avoid the burden of carbon taxation costs and minimise the impact of continued fuel price increases, but this requires more schools to support the Salix Programme and for the organisation to realise the benefits of the triple bottom line approach .