

**Open Report on behalf of Director for Communities**

Report to:	<b>Schools' Forum</b>
Date:	<b>27 April 2011</b>
Subject:	<b>Energy update</b>

**Summary:**

This report updates on activity supporting schools in reducing energy use and bills and meeting Council obligations and commitments. In particular attention is drawn, and views requested, on

- The Schools' Resource Efficiency (SCORE) pilot being run in conjunction with the Carbon Trust
- Use of Council's Revolving Fund (Salix) for investment in energy efficiency in buildings
- Potential funding mechanisms to support schools wishing to implement microgeneration schemes

**Recommendation(s):**

1. That the Schools' Forum supports the content of the report and representation is sought for the SCORE programme.
2. That the Forum's views on the funding of microgeneration schemes are sought.

**Background**

- 1.1 Lincolnshire County Council (LCC) spends around £11 million annually on electricity, gas and oil. £8.2m (75%) of this energy usage is associated with buildings. Of this £2.84m can be attributed to energy use in Council Buildings and £5.26m in schools.
- 1.2 The County Council has a number of high level commitments relating to climate change, carbon management, and environmental performance
  - Signed Nottingham Declaration on Climate Change January 2007
  - Carbon management Plan and target of 20% reduction by March 2012
  - Local Area Agreement targets of 12.5% reduction by March 2011The scope of these targets includes schools.
- 1.3 The Carbon Reduction Commitment (CRC) is a mandatory emissions trading scheme that aims to improve energy efficiency and reduce the amount of carbon dioxide (CO<sub>2</sub>) emitted in the UK. From April 2010

organisations meeting the criteria (Lincolnshire County Council does) have been obliged to participate and have to

- Monitor emissions
- Purchase allowances on an annual basis (£12 per tonne in the first phase)

Emissions from state-funded schools in Great Britain are included in the scheme through their local authority and this will include all Academies and Foundation Schools.

- 1.4 Attention is drawn to four strands of action on supporting schools in reducing energy consumption and bills.
- 1.5 **Automatic metering, monitoring and targeting** - the first phase of meter installation is nearly complete and information regarding consumption will be available soon. Awareness raising and training will take place.
- 1.6 **Schools Collaboration on Resource Efficiency (SCORE)** - The Carbon Trust is working with East Midlands councils to develop a resource efficiency programme for schools. The initial project scope is for each of the nine local authorities to work with a small (15) selection of schools to pilot initiatives and develop the programme for longevity and complete roll out across the county council's school estate. Lincolnshire County Council aim to build upon the foundations set-out in the Eco School award scheme to enhance rather than duplicate work that is currently taking place in schools across the county. It is essential that energy consumption is tackled, but wider resource efficiency and long term sustainability are also equally important for education and changes to working styles.
- 1.7 It is intended to work with three geographic clusters of schools to understand current activity; and to develop best ways of linking to current support. Representation from the Forum on the governance of the scheme would be welcome. Appendix 1 shows the current project plan.
- 1.8 **SALIX revolving fund** – as previously explained the Council has a revolving fund for investment in energy efficiency. This scheme focuses on investment with paybacks of under 5 years. Typically this includes insulation; lighting upgrades; voltage optimisation; boiler optimisation. To date schools £260,000 has been provided for 13 schools. Schemes have had average payback of 3.8 years and made annual savings of £63,000. Four case studies are included at Appendix 2. Work is underway to improve and publicise case studies and take-up of the funds.
- 1.9 **Microgeneration investment** – with the introduction of government schemes to promote electricity (Feed in Tariffs) and heat (Renewable Heat Incentive) there are significant opportunities where microgeneration is implemented in schools to reduce CO<sub>2</sub> emissions, increase renewable generation.

1.10 For generation of electricity there is support for the following technologies from 1st April 2010:

- wind turbines
- solar photovoltaic (PV) (electric)
- hydroelectricity
- anaerobic digestion
- non-renewable micro-CHP

Installations of up to 5MW are eligible to receive payments.

1.11 Key features of the scheme are

- Tariffs have been set to give a return on investment of around 5-8%
- Installations should pay for themselves at around year 8-12 of their projected 20-25 year life
- Systems must be installed by accredited members of the Microgeneration Certification Scheme (MCS)
- Generation payments regress over time (reflecting expected reductions in capital costs and to encourage early adopters)
- Generation payments are linked to RPI and guaranteed

1.12.1 Renewable Heat Incentive – currently out to consultation on the final shape of the scheme, the Government is committed to introducing it by late 2011. In the first phase, long-term tariff support will be targeted in the non-domestic sectors, at the big heat users - the industrial, business and public sector – which contribute 38% of the UK's carbon emissions. Key aspects of the scheme are

- Support for a range of technologies and fuel uses including solid and gaseous biomass, solar thermal, ground and water source heat-pumps, on-site biogas, deep geothermal, energy from waste and injection of biomethane into the grid
- Support for industrial and the commercial sector; the public sector; not-for-profit organisations and communities in England, Scotland and Wales through the RHI tariffs

Rate of returns are similar to FIT.

1.13 As previously discussed there are significant opportunities under both these schemes for schools to invest and benefit. The proposal is, with the agreement of Schools Forum, to establish a revolving fund aimed at supporting schools to install these technologies where appropriate and for the following mutual benefits to be accessed;

- Reduction in energy bills for school
- Reduction in CRC liability for LCC (funded from DSG)
- Guaranteed income
- Return on investment of 8-10%

1.14 The revolving fund would be available to all schools.

Schools would be able to contribute to the capital cost and receive the appropriate benefit (if 50% contribution then 50% of FIT and energy export plus energy savings would accrue to the school; if whole financed from scheme the LCC to benefit from FIT and energy export, school to benefit from energy bill reductions). Payments would go back into the revolving fund to assist future investment.

- 1.15 Initial funding for the scheme could come from DSG underspend (see agenda item elsewhere) or from prudential borrowing by LCC.
- 1.16 Forum views are requested.
- 1.17 To assist in making procurement easier LCC are working with ESPO and its procurement partners to establish a procurement framework. It is expected to be available from 1 August 2011 and will enable mini-competitions which should provide best quality and price.

### **Conclusion**

There are significant actions already being taken to reduce energy consumption and bills in schools. Forum support and views on two new proposals (SCORE and Microgeneration Fund) are requested.

### **Consultation**

#### **a) Policy Proofing Actions Required**

n/a

### **Appendices**

These are listed below and attached at the back of the report	
Appendix A	SCORE programme
Appendix B	Salix revolving fund case studies

### **Background Papers**

No background papers within Section 100D of the Local Government Act 1972 were used in the preparation of this report.

This report was written by Douglas Robinson, who can be contacted on 01522 554816 or [douglas.robinson@lincolnshire.gov.uk](mailto:douglas.robinson@lincolnshire.gov.uk).

