Nottinghamshire County Council

Report to Finance and Property Committee
25 February 2013

Agenda Item: 7

REPORT OF SERVICE DIRECTOR TRANSPORT, PROPERTY AND ENVIRONMENT

ENERGY COSTS AND PROCUREMENT

Purpose of the Report

1. The purpose of the report is to:
   - update Committee with regard to the procurement of energy for the Council's buildings and street lighting
   - update on projected costs of energy for this financial year and advise on the estimated fuel costs for the 2013-14 financial year
   - report on Council's carbon emissions and costs associated with mandatory participation in the Carbon Reduction Commitment Energy Efficiency Scheme, and
   - provide a brief update on current energy cost and carbon saving measures.

Information and Advice

Energy procurement

2. On the 8 February 2012 Cabinet received a report setting out progress on the procurement of electricity and gas under the Council's new contractual arrangements. This report also advised on estimated gas and electricity costs for the 2012-13 financial year and gave an update on the potential financial implications of the Carbon Reduction Commitment Energy Efficiency Scheme (CRCEES).

3. For electricity and gas for Council buildings and street lighting, Members will recall that some of the Council's supplies (covering about 70% of its consumption) are purchased under a flexible, variable procurement model, whereby energy is purchased in advance of and during the supply period (financial year). This arrangement covers electricity for larger buildings, most street lighting and all gas. Under this arrangement, 36% (gas), and 48% (electricity for larger sites and most street lighting) of next year's supplies has already been purchased, but this relatively low percentage should be borne in mind when noting the predicted energy costs in the following section.

4. Procurement of gas and electricity takes place through the Council's appointed central purchasing body, Government Procurement Service, (GPS - formerly known as Buying Solutions). Figures from GPS show that it has generally achieved actual purchase prices better than the average market price, with a three year average showing a 14.7% saving against average electricity market prices, and 16.3% saving against average gas market prices.

Energy costs

5. Table 1, below, shows the predicted energy costs (electricity and gas) for this and next financial year, compared to actual costs for 2011-12 and 2010-11.

	2010- 11 actual	**2011-12 actual**	**2012-13 predicted**	**2013-14 predicted**	**Difference compared to 2012-13 (% change in brackets)**
Street lighting	£5,592,684 (incl signals)	£3,813,514	£4,205,828	£4,636,979	£431,151 (10.3%)
Traffic signals		£300,749	£308,809	£337,201	£28,392 (9.2%)
Schools	£11,202,402	£9,102,531	£9,330,348	£9,664,464	£334,116 (3.5%)
Corporate	£4,075,688	£3,021,779	£2,905,789	£3,053,782	£147,993 (5.1%)
Total	**£20,870,774**	**£16,238,573**	**£16,750,774**	**£17,692,426**	**£941,652 (5.6%)**

Table 1. Summary of predicted electricity and gas costs for 2012-13 and 2013-14

Overall, predictions for next financial year show an increase in costs, with an average increase of around 11% for electricity somewhat offset by a 6% reduction in gas costs. It should be noted that these are very much best estimate figures based on average consumption over the past three years, predicted prices and the limited amount of energy purchased in advance, with many variable factors that can influence actual figures. Schools pay their own energy bills, and once their costs are removed, street lighting and traffic signals comprise around 60% of the Council's own electricity and gas costs. Although rising, predicted costs still compare favourably to the £21million equivalent costs for 2010-11, which was prior to the new procurement arrangements (above) being put in place. Clearly the best way to try and reduce energy costs is to use less. It is worth noting that the Carbon Trust currently recommends a figure of 5.8% for the average annual increase in energy prices, so, broadly speaking, the annual reduction in consumption needs to at least match this to keep actual costs from rising.

6. Details of predicted energy costs for 2013-14 have already been communicated to Council finance officers and passed on to appropriate budget holders and managers. Predicted costs for 2012-13 are only slightly above the projected figure of £16,365,704 used in reporting to Cabinet in February 2012.

Carbon Reduction Commitment Energy Efficiency Scheme (CRCEES)

7. Reducing emissions of carbon dioxide (the main greenhouse gas), including those from the Council's own estate and operations, is one of the Council's strategic plan priorities. Carbon emissions for the financial year 2011-12 arising from the use of energy in Council buildings (including schools), as declared in our annual report under the Government's Carbon Reduction Commitment Energy Efficiency Scheme (CRCEES), amounted to 67,453 tonnes of carbon dioxide, representing a total cost of £809,436 at the current price of £12 per tonne.

This is a reduction of 11,126 tonnes (14%) compared to 2010-11, which is largely due to a much milder winter, especially compared to the severe winter of 2010-11. This equates to a saving of £133,512.

8. In addition, carbon emissions for 2011-12 arising from the use of energy for street lighting, highway signs and signals (using the same CRCEES conversion factors) amounted to 24,515 tonnes of carbon dioxide, compared to 24,619 tonnes for the previous year. These emissions are currently excluded from the CRCEES (owing to the way street lighting energy consumption is calculated), but are reported as part of the Council's published local greenhouse gas emissions report, required by Government.

9. The Government has recently announced significant changes to the CRCEES designed to simplify the scheme and reduce the administrative burden for participants, whilst maintaining its effectiveness in delivering energy and carbon savings. The main changes with financial implications for the County Council come into effect in 2014-15, and are as follows:
   - The cost per tonne increases from £12 to £16, and then in line with RPI each year
   - Emissions from schools and academies will be excluded
   - Emissions from street lighting, signs and signals will be included.

   So whilst these changes will mean an increase in costs in 2014-15 relating to corporate properties, the pension property portfolio and street lighting, the net effect of these changes, once the cost for schools and academies is removed, is estimated to result in an annual saving to the Council of about £150,000 in 2014-15, based on current emissions.

Activity to reduce energy costs and carbon emissions

10. The Council has a number of key programmes in place to tackle energy consumption and reduce its carbon emissions. These include:
    - A £1.2million revolving loan fund for investment in energy efficiency measures, which up to the end of December 2012, had invested over £1.5million in the Council's schools and other buildings, saving 2,188 tonnes of carbon dioxide and £384,000 in energy costs per year. Measures funded include low energy lighting, energy management systems, improved heating controls and voltage optimisation.
    - A programme of street lighting energy saving measures is currently being implemented aimed at reducing energy use by 26% (compared with 2009/2010). This includes part night lighting, dimming and the use of alternative, more efficient lighting equipment.
    - Investment of £800,000 in the SunVolt programme to install photovoltaic (PV) panels on the roofs of various Council properties. To date a total of £617,061 has been spent through the programme, with £47,051 so far received as income by way of Feed in Tariffs. In addition to this, the panels have offset over £11,000 worth of electricity that the Council would otherwise have had to pay for, bringing the total financial benefit of the project to £59,530, representing a return on investment of 9.65% so far. It must be noted that as yet many of the installations have not been in operation for a whole year, so the actual annual return will be higher than this. In addition to the financial benefits, the programme has also prevented the generation of nearly 100 tonnes of carbon dioxide and raised awareness of energy issues amongst staff at the affected buildings.
    - A £2million programme approved in September 2012 to replace remaining ageing coal, oil and LPG boilers in Council properties with modern biomass heating systems. The programme will utilise the Government's Renewable Heat Incentive (RHI) to repay the capital costs and generate a surplus income for the Council. Several schools have already contacted the Council and expressed a high level of interest in taking part. This

programme follows on from previous activity, which has resulted in over 60 Council sites now heated by modern biomass boilers, saving each year over 6,000 tonnes of carbon, currently worth £72,000. This activity has been supported over the years by c£1.85million of external funding.

11. The Council will also be limiting its carbon emissions through its programme of property rationalisation and the creation of more energy efficient working environments. This has included the integration of energy efficiency measures into the refurbishment of County Hall, energy efficient design for new Council buildings such as Worksop library, and the use of low carbon technologies, such as ground source heat pumps, which feature in the new bus station at Mansfield.

12. All Council new build projects are designed to meet current building regulations and incorporate, where possible, daylight sensitive lighting controls, natural ventilation, sustainable drainage, rainwater harvesting, and other measures that save energy and reduce running costs. Use is increasingly being made of modular construction methods, which reduce time on site, help minimise waste and meet requirements for improved air tightness. Where refurbishments, such as the Schools Capital Refurbishment Programme and Day Service Review, are being undertaken, every opportunity is taken to upgrade the buildings and services to meet the current regulations and reduce future energy use.

13. The Council is also developing performance profiles for each of its property assets. These will bring together key information for each building, including running costs, energy performance rating, condition, utilisation and suitability, and will enable an assessment of each property's performance from both a building and service perspective. The profiles will also facilitate identification of poorly performing assets, development of an asset management plan for each property and a strategic plan for the portfolio as a whole. The profiles will provide Members with information to support decisions regarding which assets to retain and which to sell, and allow target setting in respect of the performance of retained assets. Furthermore, they will assist with more effective prioritisation of spending, including that on maintenance and energy efficiency measures, thus optimising the use of available funds and supporting the drive towards reducing costs.

Other Options Considered

14. Not applicable

Reason/s for Recommendation/s

15. This report is for information only.

Statutory and Policy Implications

16. This report has been compiled after consideration of implications in respect of finance, the public sector equality duty, human resources, crime and disorder, human rights, the safeguarding of children, sustainability and the environment and those using the service and where such implications are material they are described below. Appropriate consultation has been undertaken and advice sought on these issues as required.

Financial Implications

17. Energy costs are predicted to rise in 2013-14. This impacts on a number of service areas which have been informed of the predicted price increases. Affected service areas should be planning how to finance these as part of their budget setting process. The net effect of the changes to the calculation of CRCEES is estimated to result in an annual saving to the Council of about £150,000 in 2014-15 based on current emissions. The Council has a number of programmes in place to tackle energy consumption and reduce carbon emissions. These will help militate against price increases and reduce the charges for carbon dioxide emissions under CRCEES.

RECOMMENDATION/S

Committee is recommended to note the contents of this report.

Jas Hundal
Service Director, Transport, Property and Environment

For any enquiries about this report please contact:
Phil Keynes, team manager, energy and carbon management
0115 9774623

Constitutional Comments (K.K. 25/01/13)

The proposal in this report is within the remit of the Finance and Property Committee.

Financial Comments (T.R.28/01/13)

The contents of this report have been duly noted and the financial implications are clearly identified within the report.

Background Papers

None

Electoral Division(s) and Member(s) Affected

None