report

meeting	**STREET LIGHTING SELECT COMMITTEE**	
date	**22 October 2007**	**agenda item number**

Report of the Service Director, Planning & Sustainability

Energy Procurement & Carbon Management

Purpose of the report

1. To advise of the implications for street lighting in respect to (i) the procurement process for electricity supply and (ii) climate change and the Council's carbon management plan

Background

2. A scene setting report was presented to the select committee on the 17th September 2007 at which time members requested further information relating to the Council's procurement process and carbon management implications.

Issues

Procurement Process

3. The Cabinet Member for People and Performance has approved procedures for the procurement of electricity for street lighting and buildings. These procedures are in-line with 'best practice' recommendations from the Office of Government and Commerce and are fully compliant with EU procurement regulations.

4. Following an EU tender process the Council awarded a contract to a specialist energy purchasing provider UX Online. Both the electricity supply for street lighting and the gas and electricity supplies for buildings were awarded in 2006 and 2007 respectively following these procedures.

5. The benefits of these arrangements are:-

- The purchase of energy can be secured at wholesale rather than retail prices thus yielding financial savings
- Market intelligence relating to the most beneficial contract duration and time to procure (time to market) is obtained
- With energy price volatility 'time to market' is by far the most important factor in terms of energy procurement.

- The ability to compare various options (ie green and brown electricity) and purchase energy at any given time with an e-tender process.

6. Electricity produced from renewable (green) and good quality Combined Heat and Power (CHP) is not subject to the Climate Change Levy (CCL) which is a carbon tax imposed for energy generated from conventional fossil fuel (brown) sources. The additional premium for green and CHP electricity can therefore be offset against the CCL charges. Green electricity is considered to be carbon neutral and therefore represents 100% CO_2 saving whilst CHP is in the order of a 35% saving compared to brown.

7. In the previous contract the Council was able to buy green at no additional premium to the CCL charges however at the last tender green electricity was at a significant premium of £178,000. We were however able to buy CHP generated electricity at no additional net cost. There is also a much smaller contract, due to historic and geographic reasons of some street lighting being located in the Yorkshire electricity area. It was possible to obtain green at a very similar net price for this small amount however it is proposed to amalgamate this into a single contract for the next tender in order to maximise the financial benefit from the larger volume contract.

8. The table below contains the estimated consumption and annual cost figures used for tendering purposes, and indicates the steep rise in electricity prices from 2003 onwards. These resulted from an increased world energy demand for oil and gas and a lack of electricity generating capacity in the UK. The energy market has been extremely volatile since this time but has begun to stabilise, however it is predicted that energy prices will remain at these higher levels and could rise further.

	2003-5	**2005-6**	**2006-8**	
Type of Electricity	CHP	Green	CHP	Green
Consumption kWh p/a	36,484,149	36,484,149	39,099,822	1,081,009
Pence per kWh	3.917p	6.4960p	6.5174p	9.6700p
CCL (@0.43p/kWh)	0	0	0	0
Annual Costs	£1,429,084	£2,370,010	£2,548,291	£104,533
Difference		£940,926	£178,281	Standard Tariff
%		**66%**	**8%**	

9. The Council's procedures for energy procurement have been developed in order to mitigate price volatility and are featured as a case study by the Regional Centre of Excellence in their recent publication 'How to be successful in energy procurement'.

Carbon Management

10. The Councils' carbon management plan was approved by Cabinet on the 18th April 2007. Whilst energy use in buildings is the main cause of CO_2 emissions at 90,000 tonnes (75%), the electricity used for street lighting is the second biggest contributor accounting for 19,000 tonnes (16%) to the Council's CO_2 emissions from its own operations. With the purchase of green and CHP generated electricity this is reduced to 60,000 tonnes and 12,000 tonnes respectively.

11. More recently on the 19th September 2007 a report was presented to the Cabinet member for People & Performance regarding the main points of the Governments recent Energy White Paper, 'Meeting the Energy Challenge'. The Government are also proposing a new set of indicators for the new local government performance framework – Comprehensive Area Assessments (CAA) – which will replace the current round of Comprehensive Performance Assessment, to be introduced in 2009.

12. Defra has produced a set of ten draft environmental indicators for the CAA, several of which are related to climate change. The most relevant in terms of the Council's carbon management plan, is the percentage of CO_2 reduction in the local authorities own operations. Reducing emissions from street lighting could therefore make an important contribution towards achieving target reductions and meeting CAA objectives.

Options

Procurement Issues

13. The Council's procedures are in line with national 'best practice' however we are also currently reviewing two further options. One would be to consider the amalgamation of the buildings and street lighting electricity contracts which could achieve a more balanced load profile. This could yield savings however, it would be dependant upon the type of profile suppliers are looking for at the time of tender. A second option is a 3 Counties purchasing alliance for street lighting electricity supply. There is also a need to consider reviewing the street lighting energy procurement in light of the Centre of Excellence Document – "How to be successful in energy procurement" published in April 2007. It is proposed to advise members further once the evaluation process has been completed.

Carbon Management

14. Proposals for reducing emissions from street lighting are identified in the carbon management plan. The achievement of further reductions beyond those identified in the plan would require significant capital expenditure. The Council may wish to consider establishing additional revenue expenditure in order to purchase green electricity. In terms of reducing emissions from street lighting electricity use, the carbon management plan advocates a priority approach as follows:

(i) reduce the need for energy

(ii) use energy more efficiently
(iii) shift to using renewable energy

Recommendations

15. It is recommended that the Select Committee receive the information contained in this report and initiate lines of questioning as necessary.

Steve Calvert
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Background papers: nil.