



**Notice of meeting of  
Sustainable Street Lighting Scrutiny Sub-Committee**

**To:** Councillors Lancelott (Chair), D'Agorne, Moore, Potter,  
Vassie, Watson B and Waudby M

**Date:** Wednesday, 21 June 2006

**Time:** 5.00 pm

**Venue:** The Guildhall, York

**AGENDA**

**1. Declarations of Interest**

At this point, Members are asked to declare any personal or prejudicial interests they may have in the business on this agenda.

**2. Minutes** (Pages 1 - 2)

To approve and sign the minutes of the Environment & Sustainability Scrutiny Board meeting held on 8 March 2006.

**3. Public Participation**

At this point in the meeting members of the public who have registered their wish to speak regarding an item on the agenda or an issue within the Sub-Committee's remit can do so. The deadline for registering is Tuesday 20 June 2006, at 10.00 am.

**4. Draft Final Report: Street Lighting - (Pages 3 - 30)  
Strategic Management & Procurement to  
Reduce Carbon Dioxide (CO2) Emissions  
and Waste**

To consider the draft final report of the former Environment & Sustainability Scrutiny Board, presenting their research and findings regarding approaches local authorities might take to delivering more sustainable street lighting, and agree, subject to any amendments, its submission to the Scrutiny Management Committee, in line with their decision to complete outstanding scrutiny topics as a matter of urgency.

**5. Any Other Matters which the Chair decides are  
urgent under the Local Government Act 1972.**

Democracy Officer:

Name: Simon Copley

Contact details:

- Telephone – (01904) 551078
- E-mail – [simon.copley@york.gov.uk](mailto:simon.copley@york.gov.uk)

For more information about any of the following please contact the Democracy Officer responsible for servicing this meeting Simon Copley

- Registering to speak
- Business of the meeting
- Any special arrangements
- Copies of reports

---

|         |  |
|---------|--|
| MEETING | SCRUTINY BOARD – ENVIRONMENT AND SUSTAINABILITY  |
| DATE    | 8 MARCH 2006   |
| PRESENT | COUNCILLORS LANCELOTT (Chair), D'AGORNE, MOORE, POTTER, B WATSON and M WAUDBY and VASSIE |

---

## **PART A – MATTERS DEALT WITH UNDER DELEGATED POWERS**

### **43. DECLARATIONS OF INTEREST**

Members were invited to declare at this point in the meeting any personal or prejudicial interests they might have in the business on the agenda.

No interests were declared.

### **44. MINUTES**

RESOLVED: That the minutes of the meeting of the Scrutiny Board held on 8 February 2006 be approved and signed by the Chair as a correct record.

### **41. PUBLIC PARTICIPATION**

The Chair reported that no registrations to speak had been received under the Council's Public Participation Scheme.

### **42. STREET LIGHTING - A MANAGEMENT PROCUREMENT STRATEGY TO REDUCE CO2 EMISSIONS AND WASTE**

Members re- considered a report of preliminary information to support the progression of the above topic. Members noted that the Engineer (Projects) - Street Lighting was unable to attend the meeting and that limited progress could be made without being able to question him and discuss the situation in relation to street lighting in York with him.

RESOLVED: (i) to convene another meeting to which the Engineer (Projects) - Street Lighting, the Project Manager (Maintenance) - Highways and Street Operations, the Quality Assurance Manager - Highways and Street Operations and a representative from procurement attend to take the scrutiny work forward;

(ii) in addition, that colleagues from Kirklees be invited to attend the meeting;

- (iii) that the Scrutiny Officer conduct more research into the situation relating to street lighting in Finland.

M LANCELOTT  
Chair

The meeting started at 6.40 pm and finished at 6.55 pm.



---

## **Sustainable Street Lighting Scrutiny Sub-Committee**

21<sup>st</sup> June 2006

Report of the Head of Civic, Democratic and Legal Services

### **Draft Final Report: Street Lighting - Strategic Management & Procurement to Reduce Carbon Dioxide (CO<sub>2</sub>) Emissions and Waste.**

#### **Summary**

1. Members of the Sustainable Street Lighting Scrutiny Sub-Committee are presented with the draft final report of the Environment and Sustainability Scrutiny Board delivering their research and findings regarding approaches Local Authorities might take to delivering more sustainable street lighting.
2. Members of the Sub-Committee are recommended to;
  - consider the content, format and recommendations held in this report
  - agree, subject to any amendments, its submission to Scrutiny Management Committee (SMC) in line with their decision to complete outstanding scrutiny topics as a matter of urgency.

#### **Background**

3. Between 2005-2006 Scrutiny<sup>1</sup> at the City of York Council advanced the development more robust and holistic strategic approaches to delivering carbon reduction and energy sourcing across all sectors of the Council's work bar transportation fuel.
4. In January 2006 Members of the Environment and Sustainability Board chose to progress a registered topic regarding sustainable street lighting. The street lighting topic was considered by the Environment and Sustainability Scrutiny Board to be the next significant area for Scrutiny recommendations supporting the authority to monitor, manage and achieve carbon savings.
5. The report at Annex A presents their findings and recommendations at completion of their review.

---

<sup>1</sup> Through work of the Boards: Environment and Sustainability, Housing and, Planning and Transport

## Consultation

6. During the course of this scrutiny, the Regional Energy Policy Manager was consulted through correspondence regarding region wide and national exemplars for presentation to the Board. The Energie Cites data base was referred to, to establish examples of Europe wide best practice.
7. City of York Council (CYC) Officer Ricky Watson (Street Lighting), acted as the boards principal support for base line data, including that in Annex A of the attached report, and also met with a sub-group of the Board to help answer further enquiries. Officers Kristina Peat and Julian Horsler submitted early information regarding the sustainability and equalities aspects of the topic to the Board for their feasibility report.

## Options

8. **Either:** To approve the findings and recommendations of the Board in the report at Annex A
9. **Or:** To recommend no change to the authority's operations and approach to street lighting at this time

## Analysis

10. The report at Annex A was drafted in line with;
  - a. the objectives of the topic registration as lodged (see Annex B of the attached draft final report)
  - b. findings of the board regarding the advice of the feasibility consultees (see above under 'Consultation')
  - c. the boards gap analysis of authority base line data for this area revealed through completion of the street lighting section of the Regional Assemblies Energy Champions Questionnaire (see Annex A of the attached draft final report).

## Corporate Objectives

11. The Scrutiny fits with the aims of the following Corporate Objectives

'Corporate Aim 1: Take Pride in the City, by improving quality and sustainability, creating a clean and safe environment.' With particular reference to:

  - 1.2. Protect and enhance the built and green environment that makes York unique.
  - 1.3. Make getting around York easier, more reliable and less damaging to the environment.

- 1.4. Protect residents and our environment from pollution and other public health and safety hazards and act as role model in the sustainable use of resources.
12. Analysis is also given in the Glossary of the report at Annex A regarding the Scrutiny's relationship with the Comprehensive Performance Assessment (CPA) framework.

### **Implications**

13. There are no known implications in relation to the following at this stage of the draft final report:
  - **Finance**
  - **Human Resources (HR)**
  - **Equalities**
  - **Legal**
  - **Crime and Disorder**
  - **Information Technology (IT)**
  - **Property**
  - **Other**

### **Risk Management**

14. There are no risk management implications associated with the draft final report at this stage.

### **Recommendations**

15. Members of the Sub-Committee are recommended to;
  - i. Consider the content, format and recommendations held in this report
  - ii. Agree, subject to any amendments, its submission to SMC in line with their decision to complete outstanding scrutiny topics as a matter of urgency.

### **Reason**

16. To facilitate completion of the former Environment and Sustainability Board's outstanding work.

**Contact Details**

**Author:**

**Author's name:** Ruth Sherratt

**Title:** Scrutiny Officer

**Dept Name:** Scrutiny Services

Tel No. 01904 552066

**Chief Officer Responsible for the report:**

**Chief Officer's name:** Suzan Hemingway

**Title:** Head of Civic, Legal and Democratic

Services

**Report Approved**

**Date** 13/06/2006

**Specialist Implications Officer(s)**

None

**Wards Affected:** *List wards or tick box to indicate all*

**All**

**For further information please contact the author of the report**

**Background Papers:**

Draft Final Report: Street Lighting - Strategic Management /Procurement to Reduce CO2 Emissions and Waste.

And as listed in the draft final report at Annex A.

**Annexes**

**Annex A** Draft Final Report: Street Lighting - Strategic Management & Procurement to Reduce CO2 Emissions and Waste.

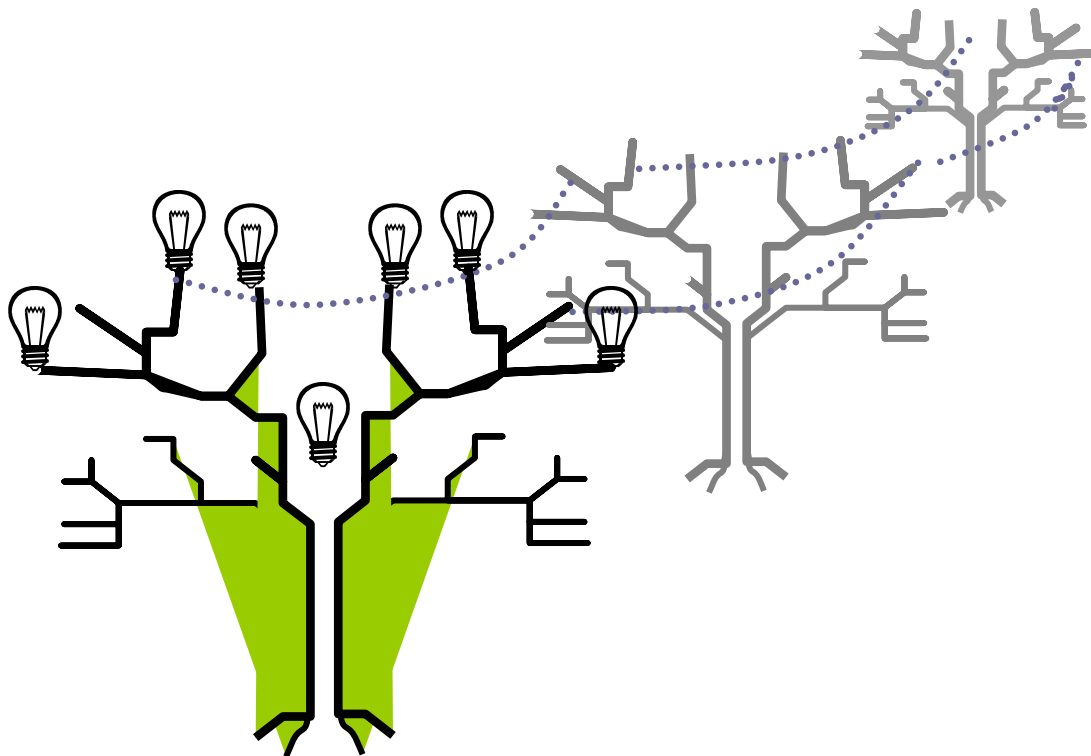




**ANNEX A**

# Sustainable Street Lighting Scrutiny Sub-Committee

Street Lighting - Strategic Management & Procurement to Reduce Carbon Dioxide (CO2) Emissions and Waste.



**Agreed at Sustainable Street Lighting Scrutiny Sub-Committee 21st June 2006**

**Considered by Scrutiny Management Committee June 2006**

**Agreed at Executive Date XXXXX**

## Chair's Foreword

## Contents

|   |     |
|---|-----|
| Chair's Foreword  | Pg. |
| Contents  | Pg. |
| Summary of Recommendations  | Pg. |
| Summary of Implications of Recommendations to the City of York Council                              | Pg. |
| Final Report  | Pg. |
| Final Comments from the Board   | Pg. |
| Board Members and Contact Details   | Pg. |
| Glossary  | Pg. |
| Annex A: Street Lighting Section of Regional Local Authority Cabinet Energy Champions Questionnaire | Pg. |

## Summary of Recommendations

1. Street Lighting Officers discuss and renegotiate the rate charged to the authority for lamp stock electricity supply to minimise financial costs and ensure that the contract to CYC includes upwards of 20% renewable sourcing to be increased towards a target of 100%.
2. Street Lighting and Finance Officers ensure that the cashable and non-cashable energy and financial savings are reported in Gershon Efficiencies responses, ring fenced and invested in increasingly sustainable lamp stock.
3. Street Lighting and Sustainability Officers ensure that CO<sub>2</sub> emissions from energy use in lamp stock are reported annually under EMAS and that targets are set for annual carbon savings.
4. Street Lighting Officers should complete the audit and data base detailing lamp stock in line with best practice and the 'whole life' details outlined at paragraph 20 as a matter of urgency prior to renegotiating the electricity contract this year.

5. Upon completion of Audit, Street Lighting Officers should prepare a lamp number reduction and replacement strategy for submission to the Executive
6. Street Lighting Officers should remain in contact with pilot authorities trialling PV lighting and endeavour to keep track of the best versions of this technology available.
7. Street Lighting Officers should consider the use of PV powered 'stand alone' systems or community netted systems installations for areas of the authority without grid netting requiring lighting. Officers should in this instance consider whole life costs of installation, including offsetting the installation costs against savings made from electricity billing during the systems life.
8. That the Elected Member Energy Champion present a first version of the Regional Assemblies questionnaire to the next Full Council and thereafter the Regional Assembly, as a record of the authorities position across all sectors to date.
9. That the Elected Member Energy Champion present six monthly updates of the Regional Assemblies questionnaire to Full Council and thereafter the Regional Assembly, as a record of the authorities progress on energy across all sectors.

## Summary of Implications of Recommendations for City of York Council

| Rec'd. | Implications |       |           |
|--------|--------------|-------|-----------|
|        | HR           | Legal | Financial |
| 1      |              |       |           |
| 2      |              |       |           |
| 3      |              |       |           |
| 4      |              |       |           |
| 5      |              |       |           |
| 6      |              |       |           |
| 7      |              |       |           |
| 8      |              |       |           |

## **Final Report: Street Lighting - Strategic Management & Procurement to Reduce CO2 Emissions and Waste.**

### **Summary**

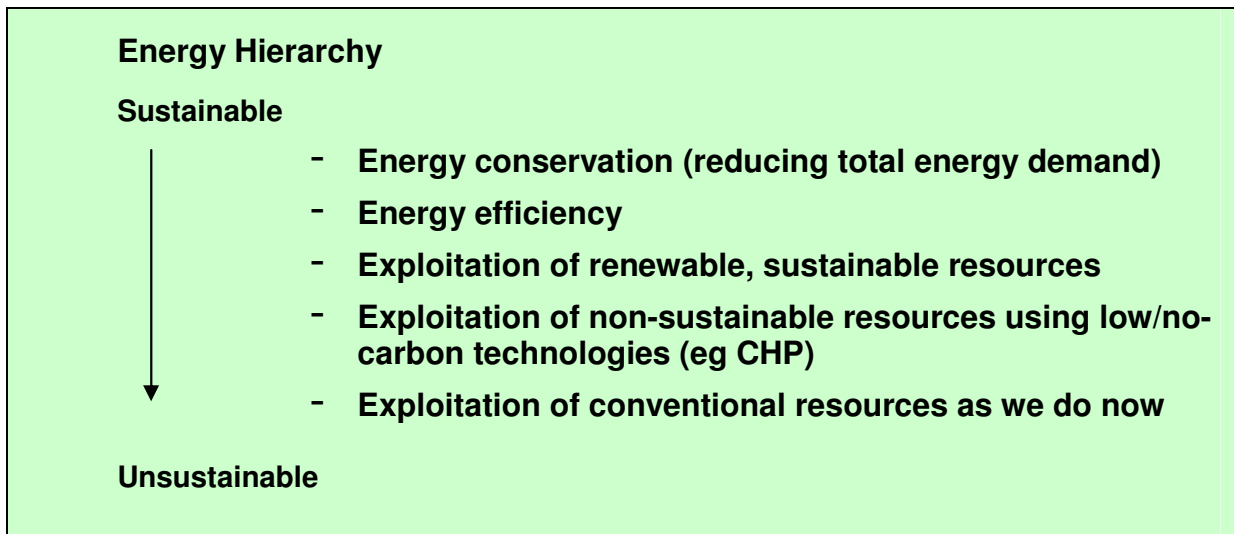
2. Members of the Executive are presented with the final report of the Sustainable Street Lighting Scrutiny Sub-Committee (formerly Environment & Sustainability Scrutiny Board) delivering their research and findings regarding approaches Local Authorities might take to delivering more sustainable street lighting.

### **Background**

3. Between 2005-2006 Scrutiny<sup>1</sup> at The City of York Council advanced the development more robust and holistic strategic approaches to delivering carbon reduction and energy sourcing. These approaches have covered all sectors of the Council's work bar transportation fuel, including;
  - a. CO<sub>2</sub> reduction from domestic property: public and private
  - b. Sustainable planning guidance
  - c. Reducing managing and monitoring energy consumption in council property
  - d. Ensuring increasingly sustainable supply and embedded micro-generation in council property
4. The street lighting topic was considered by the Environment and Sustainability Scrutiny Board to be the next significant area for Scrutiny recommendations supporting the authority to monitor, manage and achieve carbon savings in line with;
  1. The Regional Energy Hierarchy (see box below)
  2. Future development of a Climate Change Strategy
  3. Recent changes to the National Planning Policy framework promoting greater sustainability
  4. The Audit Commissions aims for increased sustainable assessment in the Comprehensive Performance Assessment (CPA); for more information regarding Comprehensive Performance Assessment see glossary
  5. Gershon efficiencies reporting; for more information regarding Gershon efficiencies see glossary

---

<sup>1</sup> Through work of the Boards: Environment and Sustainability, Housing and, Planning and Transport



### Cost And Emissions

5. When the Environment and Sustainability Scrutiny Board conducted their first scrutiny of Sustainable Energy in Council Buildings<sup>2</sup> annual energy consumption and emissions related to Street lighting (2004-05) were;

**Street lighting:** 9 million KWh consumed resulting in:  
 3,870 tonnes of Carbon Dioxide (0.43 kg CO<sub>2</sub> per KWh).  
 Annual cost £300,903 (average 3.34p per KWh)

6. The Authority's electricity bill for street lighting over the past year 2005-06 was approximately £750K, charged at 8.03p per unit. This figure (notable cost increase in part due to energy supplier price rises of around 35% across most sectors between 2003 and 2006<sup>3</sup>), compares very unfavourably with other areas of the council where the rates can be as little as 5.508p per unit.
7. On extrapolating the figures, the Board found 'suggested' financial savings in the order of £235K might be made by simply ensuring we get charged a better rate per unit. Officers advised that discussions are currently underway with the electricity supplier to renegotiate the deal CYC has with them.
8. In addressing costs the Board also considered equally environmental costs or impacts. At Wigan, a comparator authority, there are around 36,000 lamp posts and other street appliances requiring electricity. Wigan pays around £670K per annum for their energy supply, including a £14K surcharge for ensuring that all the power for its street lighting comes from wind power, a deal it has negotiated with Yorkshire Electricity and N-Power
9. York has around 20,000 lamp posts and other appliances around the city (almost half those of Wigan) and yet pays £750K (1K more per annum) to supply them with electricity that does not include any green sourcing.

<sup>2</sup> See Final Report of the Environment and Sustainability Scrutiny Board 'Sustainable Energy in Council Buildings Part 1: Energy Use, the City of York Council and Display'

<sup>3</sup> The 4<sup>th</sup> Annual Report (March 2006) of the Government's Fuel Poverty Advisory Group (FPAG)

10. There is plainly huge potential to get a much better deal from our electricity supplier for all our street lighting, such a change including partial or full renewable energy sourcing would generate very substantial savings both in cost and carbon emissions.
11. Monitoring and reporting of year on year financial savings can be seen as being in keeping with Sir Peter Gershon's review of public sector efficiency. In particular, recommendations to further embed efficiency across the public sector whilst ensuring that identified efficiency gains "*...should not only improve efficiency but support local authorities to meet challenging new environmental targets.*"
12. Reported financial savings incorporated into the authorities annual Gershon responses, should be re-invested into planned improvements to existing and future lamp stock over short, medium and long term time scales. Creating a long term savings cycle befitting the target objectives of Gershon and reflecting best practice budget management.
13. Similarly, carbon savings achieved annually should be recorded using the authorities developing Environmental Management System (EMAS) to ensure a proper approach is taken to monitoring emissions and setting annual targets for reduction. At Wigan where all street lighting is powered by wind power on a 'green power' deal the authority has wiped 5.4 million kilos of CO<sub>2</sub> emissions from the borough's slate, it should be the aim of the City of York Council to do likewise.

|                                  |
|----------------------------------|
| <b>Possible Recommendations:</b> |
|----------------------------------|

- |  |
|--|
| <ol style="list-style-type: none"> <li><b>1. Street Lighting Officers discuss and renegotiate the rate charged to the authority for lamp stock electricity supply to minimise financial costs and ensure that the contract to CYC includes upwards of 20% renewable sourcing to be increased towards a target of 100%.</b></li> <li><b>2. Street Lighting and Finance Officers ensure that the cashable and non-cashable energy and financial savings are reported in Gershon Efficiencies responses, ring fenced and invested in increasingly sustainable lamp stock.</b></li> <li><b>3. Street Lighting and Sustainability Officers ensure that CO<sub>2</sub> emissions from energy use in lamp stock are reported annually under EMAS and that targets are set for annual carbon savings.</b></li> </ol> |
|--|

### **Installed Lampstock: Quality, Nature and Number**

14. Until recently the authority had not compiled an accurate database detailing all of its lamp stock, work has been started to rectify this. The authorities known stock - 17568 street lights and approximately 2500 other lit units - covers a spectrum of gas discharge lamp types in its portfolio: from old mercury vapour lamps to low pressure sodium and high pressure sodium. There are also a few metal halide lamps. The differing kinds of lamps range in their energy efficiency and whole-life environmental performance.

15. Mercury Vapour Lamps are less energy efficient and therefore both environmentally and financially more costly. They are also poorer illuminators, the quality of street lighting is an important issue for people who feel vulnerable in the dark; particularly women, disabled people and elderly people. Hence any recommendations to alter lighting by type at an existing installation site must not reduce the quality or reliability of the lighting. Impact assessment for these communities / groups should be made prior to changes and in respect of compliance with equalities monitoring standards.
16. Removal of the old mercury vapour lamps as a starting point would bring both energy savings, and reduce recycling issues. Strategically planned replacement of the old mercury vapour lamps would also improve the authority's approach to social inclusion and equalities, as most of the mercury vapour stock is located in areas of deprivation.
17. Moving over to more efficient lamps has a further potential saving for the council. Newer more efficient lamps, such as metal halides, give more light with the potential for a greater radial spread per unit of energy. It is therefore possible to use fewer lamp posts.
18. Consideration should also be given to the height of lamp posts. Using higher columns, eg: 6 metre columns instead of 5 metre columns can have a significant impact in reducing the number of lamp posts needed by increasing the radial spread of the light produce per unit.
19. Many Local Authorities across the UK and Europe have now adopted long term lamp management plans which use increased unit efficiency to reduce the number of installed units by up to 40%. This approach creates even greater capacity for environmental and cost savings.
20. Moving from steel lamp posts and plastic fittings to aluminium lamp posts also improves the longevity of the equipment.
21. To assure future best practice at the authority the data base under construction should provide the following audit detail enabling whole life costings for each lamp by stock type, i.e;

#### **Whole Life Auditing**

- a. Lamp Life Expectancy
- b. Unit cost (financial)
- c. Unit cost environmental including expected energy usage per annum and extrapolated carbon emissions based on non-renewable sourcing
- d. Expected durability and maintenance requirements/costs
- e. Cost of installation including lamp posts, ballast, any necessary modification to the grid etc. as well as the lamps themselves
- f. Three R's<sup>4</sup> recommendations for disposal of unit at end of life
- g. Known environmental disposal risks (i.e. soil contamination from parts if landfilled)
- h. Light out-put quality and range at differing post heights

---

<sup>4</sup> Reduce, Recycle and Reuse

- i. Location of installation and distance between other installed units. are replaced, rather than refitting the lamp posts to take a different lamp it is worth also considering replacing the lamp posts.
22. Auditing and recording along these lines would provide the authority with the base line data required to;
- a. Assess the cost of replacing all the remaining mercury vapour lamps to more efficient lamps, either sodium or metal halide.
  - b. Assess the potential for unit reduction and greater distance between installed units in replacement programmes
  - c. Assess within year financial savings generated from more efficient electricity usage with the potential of immediate transfer of funds to further improvements to stock
  - d. Assess the potential for carbon savings against increasingly stringent regional and national targets
23. Around 90% of the City of York Council's street lights use electronic control gear to switch lamps on and off, this is much more efficient than the old Cadmium Sulphide photo cells that used to be routinely used to switch lamps on and off. As a result, the authority has reduced hours of artificial illumination by an estimated, 30 minutes per day at 17,500 luminaires amounting to a reduction of over 3 million hours of illumination per year. Unfortunately the way we account to our energy supplier means that this improvement is not taken into account when calculating our bills.
24. The City of York Council's energy bills do not take into account how many lamp posts we have; in part due to the lack of thorough data held by the authority. The authority is currently being charged by the energy supplier based on the length of our road network rather than the number of lamps in the authority. Whilst this is not usual, it disadvantages the city and serves as a disincentive to progress on energy efficiency.
25. Presently we are also unable to submit data regarding the energy efficiency of the lamps fitted to the energy supplier, nor have they been appraised of the fact that the authority has installed energy efficient switching equipment.
26. The present patchy methodology for recording and assessing street lamp numbers and performance may well have resulted in the authority paying considerably more to the electricity company than we need to simply because we are not declaring what lamps we are using. Other Local Authorities have found that information gathered from an accurate audit of stock submitted to the energy supplier along with accurate information on kilo watt hours of energy usage can generate further savings of around 5%.



|                                  |
|----------------------------------|
| <b>Possible Recommendations:</b> |
|----------------------------------|

- |   |
|---|
| <p><b>4. Street Lighting Officers should complete the audit and data base detailing lamp stock in line with best practice and the 'whole life' details outlined at paragraph 20 as a matter of urgency prior to renegotiating the electricity contract this year.</b></p> |
|---|



- 5. Upon completion of Audit, Street Lighting Officers should prepare a lamp number reduction and replacement strategy for submission to the Executive.**

### Alternative Models

27. During the course of the Scrutiny Board Members also considered alternative street lighting models. Hull and Kirklees Metropolitan Borough Council (KMBC) now use a limited number of 'stand alone' solar electricity lamp installations. Those illustrated are part of a group of four Solar Street lights being trialled in KMBC's Newsome Ward.
- 

28. The installations at Newsome have been well received by the neighbourhood as part of a broader PV and solar initiative. The installations have the benefit of light generation even during power cuts and the offsetting of installation costs against their useful life span. The lamps have suffered no vandalism which is often a matter of concern to authorities considering them. The lamps are a good means of providing illumination in non-grid netted areas.
29. The following disadvantages were also noted in considering this technology, the luminosity of the lamps is presently poorer than that of grid netted sodium or metal halide lighting, it should be noted however that industry is rapidly improving the quality of all forms of PV powering. Whilst installation costs will be paid back during the systems life initial investment is high.
30. The Board also considered studies from Energie Cités<sup>5</sup> regarding strategies for large scale retroacted sustainability into street lighting schemes. The most effective European models use the auditing and reduction approaches detailed in this report combined with sourcing using community or district renewable sourcing networks. Community sourcing networks generally use locally situated wind turbines and/or photovoltaic arrays to provide power within a local grid area, this provides an advantage over stand alone PV installation as the lamp units may still be high luminosity sodium or metal halide.
31. Targets to generate quality (Combined Heat and Power) CHP by 2010 and expand or increase Community microgenerated grids – all sources - may pave the way for improved sustainable sourcing on street lighting in the UK. This will however be dependant on authorities taking a positive stance, using Planning Policy Statement 22 on Renewables etc, to requiring developers (particularly of medium to large scale sites) to show consideration for the broader community infrastructural requirements of their proposals in the brief. This may be an issue that authorities

<sup>5</sup> the association of European local authorities for promotion of local sustainable energy policies. See <http://www.energie-cites.org/>

wish to consider as part of their Special Planning Guidance framework and explore further with Sustainability officers and planners.

**Possible Recommendations:**

6. **Street Lighting Officers should remain in contact with pilot authorities trialling PV lighting and endeavour to keep track of the best versions of this technology available.**
7. **Street Lighting Officers should consider the use of PV powered ‘stand alone’ systems or community netted systems installations for areas of the authority without grid netting requiring lighting. Officers should in this instance consider whole life costs of installation, including offsetting the installation costs against savings made from electricity billing during the systems life.**

**Championing, Managing and Monitoring Continuous Improvement**

32. During evidence gathering for the ‘Street Lighting’ topic Members requested that the Street lighting section of the Yorkshire and Humber Assembly Elected Member Energy Champions Questionnaire be completed; see Annex A. Scrutiny at the City of York Council was instrumental in supporting the Assembly’s production of the questionnaire and fully supports the initiative which aims to engender a better understanding and application of best practice region wide.
33. The City of York Council appointed Cllr. Christian Vassie as its Elected Member Energy Champion at Full Council 25<sup>th</sup> May 2006. As a result of this Scrutiny the Board hope that the initial responses to the Street Lighting questionnaire will see significant improvement over the next year. In addition to recording possible financial savings through Gershon and CO<sub>2</sub> savings within EMAS it is proposed that updated versions of the full questionnaire be presented to the City of York Council Executive and Regional Assembly Energy on a six monthly basis to support monitoring of improvements.

**Possible Recommendations:**

8. **That as a matter of urgency the Elected Member Energy Champion present a first version of the Regional Assemblies questionnaire to the next Full Council and thereafter the Regional Assembly, as a record of the authorities position across all sectors to date.**
9. **That the Elected Member Energy Champion present six monthly updates of the Regional Assemblies questionnaire to Full Council and thereafter the Regional Assembly, as a record of the authorities progress on energy across all sectors.**

## Final Comments from the Board

The Environment and Sustainability Scrutiny Board would like to acknowledge the assistance of a number of people for their technical support and advice to the Board throughout various points of the Scrutiny. The Board extends its thanks to each of those listed below.

|                       |  |
|-----------------------|--|
| <b>Kristina Peat</b>  | Sustainability Officer, CYC                            |
| <b>Ricky Watson</b>   | Street Lighting Engineer, CYC                          |
| <b>Julian Horsler</b> | Equalities Officer, CYC                                |
| <b>Andrew Cooper</b>  | Yorkshire and Humber Assembly<br>Policy Manager Energy |

### Contact details:

#### Authors:

**The Environment and Sustainability Scrutiny Board**

#### Supporting Scrutiny Officer to the Board:

Ruth Sherratt

Tel: 01904 552066

E-mail: [r.sherratt@york.gov.uk](mailto:r.sherratt@york.gov.uk)

For further information please contact the supporting scrutiny officer in the first instance

## Members of the Environment and Sustainability Scrutiny Ad-Hoc Panel 2005-May 2006

|                   |                        |
|-------------------|------------------------|
| <b>Chair</b>      | Cllr. Martin Lancelott |
| <b>Vice Chair</b> | Cllr. Brian Watson     |
|                   | Cllr. Andrew D'Agorne  |
|                   | Cllr. Richard Moore    |
|                   | Cllr. Ruth Potter      |
|                   | Cllr. Christian Vassie |
|                   | Cllr. Mark Waudby      |
|                   | Cllr. David Horton     |

Other Members involved in progressing the topic 2004

## Background Papers & Publications

Title and Author(s)  
CPA 2005 Key Lines of Enquiry for Corporate Assessment (KLOE).

Publisher and Date  
**Audit Commission**  
Sept 2005

Environment and Sustainability Scrutiny Board -  
Energy Use In Council Buildings

**CYC Executive 2<sup>nd</sup> Feb**  
2005

| Title and Author(s)   | Publisher and Date   |
|---|--|
| Environment and Sustainability Scrutiny Board -<br>Generating the Future<br>Draft Environmental Policy And Update On Preliminary Review<br>For The Environmental Management System (Ems). | January 2006<br><br>CYC Environment &<br>Sustainability EMAP<br>20 <sup>th</sup> April 2004<br>ODPM May 2005 |
| Feedback on the Consultation Exercise for the Best Value<br>Performance Indicators for 2005/2006  | June 2005  |
| Review of Sustainable Energy - Beacons sustainable energy<br>theme<br>Local Quality of Life Indicators – Supporting Local Communities<br>to Become Sustainable                            | I&DeA Learning Pages<br>ODPM, LGA, DEFRA, AC<br>August 2005  |
| Planning for Renewable Energy A Companion Guide to PPS22  | ODPM 2004  |
| Planning Policy Statement 22: Renewable Energy  | ODPM 2004  |
| Releasing resources to the front line<br>Independent Review of Public Sector Efficiency<br>Sir Peter Gershon, CBE   | Crown Copyright July<br>2004   |

## GLOSSARY

|                   |  |
|-------------------|--|
| <p><b>CPA</b></p> | <p>The Audit Commissions 'CPA 2005 Key Lines of Enquiry for Corporate Assessment'<sup>6</sup> and 'Technical Guide to the Service Assessment Framework (CPA 2005)' were published September 2005.</p> <p>Audit's stated aim in respect of Sustainability, Environmental Management and Energy presents a more robust CPA framework; <i>.."to cover a more substantial area of the council's environmental service function and .....take a broader view of the council's environmental performance"</i></p> <p>Under the <b>Key Lines of Enquiry</b> for assessing Local Authority performance against 5 themes, Local Authorities are obliged to provide evidence of the delivery against sub-themes or priorities agreed by the ODPM's Central and Local Government Partnership.</p> <p><b>Theme 5.1 Sustainable Communities and Transport</b> has particular bearing upon the work related to sustainable energy and energy efficiency. Criteria for judgement at Level's 2 and 3 of 5.1.3 relating to an authorities internal policy and monitoring framework and the Planning Authority role. Sub Theme 5.1.3 and associated criteria for judgement is copied below.</p> <p><b>5.1.3 What has the council, with its partners, achieved in its ambitions for the local environment</b></p> |
|-------------------|--|

<sup>6</sup> September 2005 and October 2005

|                                     |   |
|-------------------------------------|---|
|                                     | <p><b>Evidence that</b></p> <ul style="list-style-type: none"> <li>the council, working in partnership with others, has established and is delivering on its clean and green liveability agenda</li> <li>the council, working in partnership with others, has contributed to ensuring environmentally sustainable communities and lifestyles</li> </ul> <p><b>Criteria for Judgement:</b></p> <p><b>Level 2:</b></p> <ul style="list-style-type: none"> <li>The council is addressing the quality of design in buildings and public spaces and is addressing these matters in its local development plans. There has been some increase in the proportion of new developments (for example, public buildings, housing, fixed infrastructure) which mitigate the effects of, or adapt to the impact of, climate change during planning, design and construction.</li> <li>The council is setting a positive example to others through its environmental management practices</li> </ul> <p><b>Level 3:</b></p> <ul style="list-style-type: none"> <li>The council has reduced its own resource consumption significantly and is able to quantify the cost of these and the environmental impact these policies have had.</li> <li>The council is effectively addressing significant local and global environmental issues and actively communicating environmental issues to the wider community</li> <li>Buildings and open spaces are designed to a high quality and this is addressed in the local development plans. There has been a sizeable increase in the proportion of new developments (for example, public buildings, housing, fixed infrastructure) which mitigate the effects of, or adapt to the impact of, climate change during planning, design and construction.</li> </ul> |
| <p><b>Gershon Efficiencies:</b></p> | <p>In June 2004 Sir Peter Gershon's "<i>Independent Review of Public Sector Efficiencies</i>" identified opportunities for savings and improved time and resource management within the sector's back office, procurement, transaction service and policy-making function. A series of cross-cutting recommendations embedding efficiency across the public sector were created to release £6.45 billion nationally from efficiencies over the next 3 years.</p> <p>Local Authorities are required to identify potential efficiencies annually they have been allowed to include efficiencies from 2004/05 within the 2005/06 target in recognition of the newness of the efficiencies concept to local government. Local authorities must produce an Annual Efficiency Statement (AES) for each financial year<sup>7</sup>.</p> <p>At least half of the efficiency gains must be <i>cashable or recyclable</i></p>   |

7

City of York Council needs to identify £1.5 million of efficiencies a year for 2006/07 and 2007/08 to meet its target, as long as the £4.7 million is achieved in 2005/06.

|  |  |
|--|--|
|  | <p>i.e. direct financial saving or benefits creating funds for re-investment into services or activities increasing service output. <i>Non-cashable</i> gains may not necessarily lead to lower costs but will lead to improved performance for the resources used. All identified efficiencies must be on-going for the 3-year period; one-off gains are not allowable.</p> <p>. In respect of efficiencies relating to energy sourcing and management, the report is clear that identified efficiency gains “...<i>should not only improve efficiency but support local authorities to meet challenging new environmental targets.</i>”</p> <p>. In order to achieve these co-objectives the report also indicates that “..<i>effective strategy, evidence based policy and focused inspection and regulation are critical to driving up performance in public services</i>”</p> <p>. The Environment and Sustainability Scrutiny Board’s second sustainable energy report to the Executive – Generating the Future – recommended that <i>‘the City of York Council appoint an Elected Member as the Authority’s representative for the Regional Cabinet Energy Champions project and that this appointment and their activities be recorded and reported at meetings of the Council’.</i></p> |
|--|--|

## Background Papers

### Document

Sustainable Energy in Council Buildings Part 1: Energy Use, the City of York Council and Display'

'Sustainable Energy In Council Buildings Part 2: Generating the Future'.

Securing The Future - The UK Government Sustainable Development Strategy

Local Quality of Life Indicators – Supporting Local Communities to Become Sustainable

Feedback on the Consultation Exercise for the Best Value Performance Indicators for 2005/2006

CPA 2005 Key Lines of Enquiry for Corporate Assessment (KLOE).

Service Assessment Framework Technical Guide to CPA 2005

Releasing resources to the front line Independent Review of Public Sector Efficiency

### Publisher

The Environment And Sustainability Scrutiny Board Oct 2005

The Environment And Sustainability Scrutiny Board January 2006

Crown Copyright 2005

ODPM, LGA, DEFRA, AC August 2005

May 2005

Audit Commission September 2005

Audit Commission October 2005

This page is intentionally left blank



## ANNEX A

| <b>Street Lighting<br/>(Cabinet Energy Champions Questionnaire)</b> |  |
|---|--|
| <b>1.</b>   | <p><b>How many streetlights are there in the district?</b></p> <p>17568 street lights and approximately 2500 other lit units<br/>Contact Officer telephone/email: Ricky Watson Engineer (Projects) - Street Lighting</p>   |
| <b>2.</b>   | <p><b>What other outside (i.e. not within or directly attached to buildings property) lighting forms (possibly installations at roundabouts, flood lighting at leisure amenities, bus shelters etc) are the responsibilities of the Local Authority?<br/>Please list types and number</b></p> <p>Some Floodlights, Gas Lights, Bollards, Signs, Bus Shelters, signals<br/>Contact Officer telephone/email Ricky Watson Engineer (Projects) - Street Lighting</p> |
| <b>3.</b>   | <p><b>What is the electricity consumption for street lighting over the last 3 years so we can assess trends?</b></p> <p>We have no accurate figure over the last three years as invoices were paid based on unmetered agreed rates, and these figures were incorrect.<br/>Contact Officer telephone/email Ricky Watson Engineer (Projects) - Street Lighting</p>   |
| <b>4.</b>   | <p><b>What percentage of electricity for streetlights is purchased from a green tariff?</b></p> <p>I do not know, as all energy is purchased through N-Power. Nb see opening paragraphs of the report<br/>Contact Officer telephone/email Ricky Watson Engineer (Projects) - Street Lighting</p>   |
| <b>5.</b>   | <p><b>Have you any policies to address the growth in streetlight numbers due to development?</b></p> <p>None other than the have to conform to current standards, and all schemes must be approved by myself (both design wise and materials wise).<br/>Contact Officer telephone/email Ricky Watson Engineer (Projects) - Street Lighting</p>   |

**Street Lighting  
(Cabinet Energy Champions Questionnaire)**

**6. Does the Council have a rolling programme or policy for replacing lighting fixtures and if so what is this?**

We have a basic capital fund for the replacement of structurally unsound equipment; all other improvements are paid for via the Wards. Ricky Watson Engineer (Projects) - Street Lighting

This has the potential to affect all wards. All ward committees from time to time will consider the installation of new street lighting schemes through the ward committee budget process. It should be noted that the reason that ward committees fund these schemes is due to the lack of funding with DEDS for this. The work is commissioned and implemented by Ray Chaplin's consultancy team utilised external contractors. I am not sure that members of the public consider the issues within the proposed topic when they suggest street lighting schemes. They mainly do this from a community safety perspective. The NPU play no role in the procurement process or the specification of the standard of the street lights. There is potential conflict between the potential reasons why the public suggest the schemes and the desire to control light pollution, although there is technology available to control this.

Contact Officer telephone/email Zoe Burns Head of Neighbourhood Pride Unit

**7. Does the Council have a rolling programme or policy for replacing or checking lighting fittings – i.e. bulbs etc - and if so what is this?**

All lamps are replaced every three years, in order to maintain the maximum luminous efficacy.

Contact Officer telephone/email Ricky Watson Engineer (Projects) - Street Lighting

**8. Has the authority specified that bulbs used in its street lighting are environmentally friendly and of low energy consuming types, if not what are the present types used?**

All items will fall under the WEEE Directive. There is no such thing as a low energy gas discharge lamp, as they are the most efficient current form of lighting.

Contact Officer telephone/email Ricky Watson Engineer (Projects) - Street Lighting

**Street Lighting  
(Cabinet Energy Champions Questionnaire)**

**9. Has the authority installed any solar powered or alternately renewably sourced street lighting?**

No as they don't work and can't guarantee that a safe level of lighting will be maintained. We had used them before and had to remove them because of this (our main obligation is to ensure that the lighting we have is lit). Previously we installed solar lights above the bus stops, within a very short time it was evident that the solar panels were not providing sufficient power for the batteries to be re-charged. A similar problem is occurring at the moment with Vehicle activated speed signs (which are low voltage!) we have already had to remove the batteries twice and recharge them in our contractors depot. I think that the main issue is there is insufficient sunlight in York to ensure enough energy for this equipment to function as it should. I think it is important to note that we must be able to guarantee a constant supply of energy to any equipment we use. Ricky Watson Engineer (Projects) - Street Lighting

The following related issues for consideration were provided by the City of York Council's Equality Officer. the quality of street lighting remains an important issue for people who feel vulnerable in the dark (particularly women, disabled people and elderly people). Hence any recommendations should ensure that if there is any reduction in quality or reliability of lighting that the impact on these communities / groups is assessed before any change is made.

Contact Officer telephone/email Julian Horsler Equalities Officer

**10. To your knowledge how many streets in York, which are 'off net' might benefit from the introduction of stand-alone or cluster netted solar powered or alternately renewably sourced street lighting?**

None, not a realistic proposal.

Contact Officer telephone/email Ricky Watson Engineer (Projects) - Street Lighting

**11. Are you aware of any innovative best practice measures taken by other Local Authorities within the UK to reduce energy used in street lighting or to source street lighting more sustainably? If so please provide details**

Yes, we are specifying more efficient electronic control gear and more accurate photo voltaic cells to reduce the overall circuit wattage.

Contact Officer telephone/email Ricky Watson Engineer (Projects) - Street Lighting

**12. If any or all of the arrangements for street lighting are made through a contractor, what measures are taken to ensure that low energy bulb specifications and other environmental best practice measures are enforced through the terms of the contract.**

We specify "quality equipment" which ensures that they operate more efficiently.

Contact Officer telephone/email Ricky Watson Engineer (Projects) - Street Lighting

This page is intentionally left blank



**ANNEX B**

**SCRUTINY TOPIC REGISTRATION FORM**

|   |   |
|---|---|
| <p><b>SUGGESTED TITLE OF TOPIC</b></p> <p><b>Street Lighting</b> – a management/procurement strategy to reduce CO2 emissions and waste</p>  |   |
| <p><b>ABOUT YOU</b> Please fill in as many of the details as you are able to.</p>   |   |
| <p><b>Title (delete as applicable):</b> Mr</p> <p><b>Other please state</b> Cllr</p>  |   |
| <p><b>First Name:</b> Christian</p>   | <p><b>Surname:</b> Vassie</p>   |
| <p><b>Address:</b> 10 Blake Court,<br/>Wheldrake,<br/>York YO19 6BT</p>   | <p><b>Daytime Phone:</b> 01904 449 206</p> <p><b>Evening Phone:</b></p> <p><b>Email:</b> cllr.cvassie@york.gov.uk</p> |
| <p><b>Are You</b> (delete as applicable)</p> <ul style="list-style-type: none"> <li>• <b>A Resident of York</b></li> <li>• <b>A Visitor</b></li> <li>• <b>A City of York Councillor</b></li> <li>• <b>A City of York Council Employee</b></li> <li>• <b>A Representative of a Voluntary Organisation or Charitable Trust</b><br/>(if YES please tell us the organisations title and your relationship to the organisation below )</li> <li>• <b>Other</b> (please comment)</li> </ul> | <p>YES</p> <p>NO</p> <p>YES</p> <p>NO</p>   |

**ABOUT YOUR PROPOSED TOPIC**

Please write your responses to as many of the questions below as you are able to.

**WHY DO YOU THINK THIS TOPIC IS IMPORTANT?** As part of demonstrating our commitment to addressing the issue of Climate Change, and reducing CO2 emissions, it is vital that we properly audit our street lighting.

To ensure our street lighting is making a minimum impact on the environment we have to be sure we are using long lasting and energy efficient bulbs, whilst obviously insisting that they provide the level of lighting we need and that the costs are not prohibitive.

We need a coherent procurement strategy to ensure we are purchasing the most energy efficient bulbs and we need to a maintenance strategy that is both cost effective and creates the minimum amount of waste.

As the electricity bill the city pays for street lighting is based on assessments we provide, rather than on metering, we must know what we are using where, and know that our bulb procurement policy is geared to reducing bills by promoting energy efficiency.

As part of this topic we must also our procurement policy is not creating light pollution.

**DO YOU KNOW IF THIS TOPIC IS IMPORTANT TO OTHER PEOPLE? IF SO, WHO AND WHY?**

An effective street lighting management/procurement policy will reduce CO2 emissions and reduce the city's energy bills. Both of these will benefit the public.

**WHAT DO YOU THINK SCRUTINY OF THIS TOPIC MIGHT CHANGE, DO OR ACHIEVE?**

Provide a report enabling the necessary changes to be made to procurement and management policy.

DO YOU HAVE IDEAS ABOUT THE APPROACH SCRUTINY MEMBERS MIGHT TAKE TO YOUR SUGGESTED TOPIC?

Speak with Street lighting manager to learn about current practice.

Speak with one or more of the engineers who actually does maintains the street light. I understand bulbs are currently being changed when the lighting units are cleaned. If true, this is very wasteful. Negotiation and discussion would, I hope, help to create a better strategy.

Get input from the European lighting confederation and/or others to get latest news on the most energy efficient lighting available.

Produce a procurement / management strategy to put before the executive.

WOULD YOU BE HAPPY TO TALK TO SCRUTINY MEMBERS ABOUT YOUR PROPOSED TOPIC AT FORMAL MEETINGS?

PLEASE ENCLOSE ANY SUPPORTING DOCUMENTS OR OTHER INFORMATION YOU FEEL MIGHT BE USEFUL BACKGROUND TO THE SUBMISSION OF THIS TOPIC FOR CONSIDERATION.

## OUR COMMITMENT TO YOU

Thank you for proposing a new scrutiny topic. As Members of the Scrutiny Management Committee and Scrutiny Boards we promise the following things;

- To advise you of any meetings where a decision will be taken as to whether to progress your topic and invite you to attend
- If Members would like you to speak in support of your topic at such meetings you will be notified and supported through the process by a Scrutiny Officer
- If you do not wish to speak you do not have to; your choice will not influence fair consideration of your topic.

Please return this form to the address below or send it by email. If you want any more information about Scrutiny or submitting a new topic for consideration then please contact the Scrutiny Team.

**By Writing to:**

The Scrutiny Services Team  
C/o The Guildhall  
York  
YO1 9QN

**Or Email:** [Scrutiny.services@york.gov.uk](mailto:Scrutiny.services@york.gov.uk)

**Or Phone:** 01904 552038

---

**For Scrutiny Administration Only**

**Topic Identity Number**

**Date Received**

**SC1- date sent**