

North Tyneside Council Report to Cabinet 9 June 2014

ITEM 7(a)

Response to Overview and
Scrutiny Committee Report
on Street Lighting

Portfolio(s): Housing and Environment
Sustainable Development
Finance and Resources

Cabinet Member(s): Cllr John Harrison
Cllr John Stirling
Cllr Ray Glindon

Report from Service

Area: Environment and Leisure

Responsible Officer: Phil Scott, Head of Environment and Leisure **Tel:** (0191) 643 7295

Wards affected: All

PART 1

1.1 Purpose:

The purpose of the report is for Cabinet to consider the recommendations as set out in Appendix One received from the Overview and Scrutiny Committee in relation to its review of Street Lighting.

1.2 Recommendation:

It is recommended that Cabinet agrees the proposed response to the recommendations from the Overview and Scrutiny Committee on Street Lighting as set out in Appendix One of this report.

1.3 Forward Plan:

Twenty eight days notice of this report has been given and it first appeared on the Forward Plan that was published on 9 May 2014.

1.4 Council Plan and Policy Framework

This report links to 'Our North Tyneside' Council Plan particularly to Priority 2 – Our Places - to reduce the Borough's carbon footprint, as outlined in the 2013/14 Action Plan.

1.5 Information:

Background

1.5.1 A sub-group of the Environment and Culture Sub-committee was established in June 2013 to explore the different options for street lighting with a view of reducing energy consumption and to achieve efficiency savings. On completion of the review the sub group presented their findings and four recommendations to Cabinet at its meeting on 13 January 2014. After consideration Cabinet accepted all four recommendations made.

1.5.2 Given the tight timescale for the initial review, the sub-group did not have enough time to investigate in detail whether part night switch off was a viable option for selected non residential areas of the borough, but did agree that this was something that should be considered as a longer term option. The sub-group recommended that Cabinet give further consideration to the option of part night switch off in non-residential areas (recommendation 4 in the original November 2013 Cabinet report). Cabinet responded by asking the sub-group to reconvene and to work with officers to investigate the options available for part night switch off and then report back to Cabinet with their findings and recommendations.

1.5.3 A sub-group of the Environment and Culture Sub-committee was established and reconvened to carry out the study. Members of the sub-group included:

Cllr Brian Burdis
Cllr Gary Bell
Cllr Cath Davis
Cllr David Ord.

1.5.4 The sub-group met with Andrew Gate, Senior Manager for Commercial Partnerships and Victoria Taylor, Major Contracts Officer on two occasions, 26 February 2014 and 13 March 2014. This enabled the sub-group to gather evidence and discuss the options for part night switch off in non residential areas to help them formulate recommendations. Cabinet received the recommendations of the Overview and Scrutiny Committee in at its meeting on 7 April 2014.

1.5.5 Since 2012, the Authority has been running a part night switch off trial on a section of the A189 dual carriageway covering 46 units. There have been no adverse impacts arising from this initiative and no public complaints.

1.5.6 In total two recommendations in support of trialling part night switch off were identified by the sub-group and set out in the Overview and Scrutiny report to Cabinet on 7 April 2014.

Recommendation 1: That Cabinet considers implementing a trial of part night switch off between midnight and 5.30am in the non-residential areas listed in the scheme attached at Appendix Two subject to consultation with Ward Members, and that this is facilitated through extending the Mayflower Central Management System to these areas.

Recommendation 2: That Cabinet ask the Senior Manager of Commercial Partnerships to seek feedback from residents and local businesses once the part night switch off trial has been in operation for three months.

1.5.7 Set out in Appendix One is Cabinet's response to these Overview and Scrutiny recommendations.

1.6 Decision options:

The following decision options are available for consideration by Cabinet:

Option 1

Agree the recommendations set out in section 1.2 of this report

Option 2

Not agree the recommendations set out in section 1.2 of this report.

Option 3

Refer the recommendations set out in 1.2 back for further consideration.

Option 1 is the recommended option.

1.7 Reasons for recommended option:

Option 1 is recommended for the following reasons: Cabinet needs to respond to the recommendations made by the Overview and Scrutiny Committee. The part night switch off scheme will reduce energy consumption by 1.3 million kilowatt hours (kwh) per annum. At the current energy cost of 10p per kwh this generates an annual saving in excess of £130,000. The scheme will save 702 tonnes of carbon (CO₂) annually and have a major impact in reducing the Authority's carbon footprint in line with our environmental commitments. Implementing the scheme set out in appendix two through the use of the Mayflower Central Management System will enable the Authority to vary the lights that are switched off on any particular night in response to any Police, resident or local business concerns and to make alterations for any planned events and to respond quickly to any incidents.

1.8 Appendices:

Appendix One: Cabinet's response to the Overview and Scrutiny recommendations.
Appendix Two: List of locations proposed for the Part Night Switch Off scheme.

1.9 Contact officers:

Phil Scott, Head of Environment and Leisure Services (0191) 643 7295
Andrew Gate, Senior Manager for Commercial Partnerships (0191) 643 6450
Sharon Ranadé, Scrutiny Advisor (0191) 643 5614
Victoria Taylor, Major Contracts Officer (0191) 643 6551
Irene Ng, Lawyer Specialist – Contracts (0191) 643 5340

1.10 Background information:

The following background paper/information has been used in the compilation of this report and is available at the office of the author:

- (1) [Report 5a to Cabinet 11 November 2013 on Street Lighting from Overview and Scrutiny](#)
- (2) [Cabinet Response 7f 13 January 2014](#)
- (3) [Further Report 5a to Cabinet 07 April 2014 on Street Lighting from Overview and Scrutiny.](#)

PART 2 – COMPLIANCE WITH PRINCIPLES OF DECISION MAKING

2.1 Finance and other resources

2.1.1 Summary

The proposed scheme under recommendation 1 is an invest-to-save scheme. The Authority is asked to provide £204,000 of funding to purchase and install the Mayflower Central Management System across 3,200 units in non residential areas of the Borough (as set out in appendix two). The Central Management System will enable the Authority to remotely turn off these street lights between midnight and 5.30am.

Once the system is fully installed, turning off all of these 3,200 units between midnight and 5.30am will save 1.3 million kilowatt hours (kwh) of electricity per annum. At the current cost of electricity, 10p per unit, this would generate an annual saving of £130,000.

The investment therefore has a pay back period of less than two years.

The financial implications of approving this scheme are set out in 2.1.2 below. It is also important to understand this initiative in the wider context of the Street Lighting budget and this is stated in sections 2.1.3 to 2.1.6 below.

2.1.2 Part Night Switch Off Scheme – detailed considerations

If Recommendation 1 which relates to purchasing and implementing the Mayflower Central Management System is accepted, this would require the Authority to fund the costs of the service provider, SSEC, supplying and fitting the Mayflowers. SSEC have stated the cost for this will be £204,000. It is recommended that this is done by using the Street Lighting PFI reserve (the Reserve).

The Reserve exists to smooth payments across the 25 year life of the contract and to ensure there are sufficient funds to end the Contract in year 25. Interest at 5% is paid on the Reserve balance and should the balance be reduced then this interest would be lost on the amount taken for each year that the reduced balance was carried forward. 5% of £204,000 is £10,200.

The Reserve is regularly reviewed to ensure that it has sufficient funds in it to meet future requirements for the end of the contract. Currently the reserve is increased by £31,000 per annum in line with modelled projections. The value of the Reserve currently stands at just over £760,000. This would go down to around £560,000 if this recommendation were accepted. The Reserve will build up each year by the annual payments of £31,000 but will receive less interest on the lower balance. The Reserve is planned to build up until the last 3 years of the Contract when it is drawn down over the last years of the contract to cover the end of contract liabilities. The Authority has flexibility as to when and by how much it replenishes the Reserve but would need to have restored the Reserve balance to the modelled level before it is called upon in 2026/27 onwards. Modelled assumptions do change over time as they are reviewed in the light of actual experience so the amount to be paid back may be less than that taken out.

Once Central Management is installed onto a street light then the on going maintenance responsibility falls to SSEC over the life of the PFI Contract. There are maintenance and operational savings in the unitary charge from having the Central Management System but there are also annual licensing costs for the Mayflower software and communications links. SSEC have indicated that these will balance within the existing unitary charge payments and therefore there should not be any unitary charge increase arising from the introduction of this scheme.

Turning off all of the 3,200 units between midnight and 5.30am will save 1.3 million kilowatt hours (kwh) of electricity per annum.

At a cost of 10p per unit this generates an annual saving of £130,000. Electricity prices have risen sharply over the first 10 years of the contract. If they continue to rise then the annual cash savings will increase each year.

In 2013/14 the Service Provider charged the Authority for consumption of 17.52 million kwh. Reducing consumption by 1.3 million kwh diminishes the effect on the Authority of further energy price rises. If energy prices rise by 1p to 11p then the full year effect of this price rise on the 2013/14 consumption level is an increase of £175,201. With the part night consumption reduction taken into account this increase falls to £162,201.

| | 2013/14 Consumption level | With Part Night Consumption level | Price Difference |
|--------------------|---------------------------------|-----------------------------------------|------------------|
| Kwh | 17,520,063 | 16,220,063 | |
| <u>Energy Cost</u> | | | |
| 9.5p | £1,664,406 | £1,540,906 | £123,500 |
| 10.0p | £1,752,006 | £1,622,006 | £130,000 |
| 10.5p | £1,839,607 | £1,703,107 | £136,500 |
| 11.0p | £1,927,207 | £1,784,207 | £143,000 |
| 11.5p | £2,014,807 | £1,865,307 | £149,500 |
| 12.0p | £2,102,408 | £1,946,408 | £156,000 |
| 10p to 11p | £175,201 | £162,201 | £13,000 |

Under International Finance Reporting Standards (IFRS) introduced in 2010, the Authority now recognises the value of the Street lighting estate as an asset on its Balance Sheet. The asset is depreciated over the expected residual life of the lighting columns. The carrying value of the asset may need to be adjusted to recognise the additional 3,200 Mayflower Central Management System units that would be added under this recommendation.

2.1.3 The Wider Context – Street Lighting Budget Pressures

The service has faced budgetary pressures over the last 5 years. The revenue budget to pay the PFI service provider has lagged behind the actual level of unitary charge payments. This is set out in the following table.

| Year | Actual £ | % Change | Budget £ | % Change | Shortfall £ |
|---------|-----------|-------------|-----------|-------------|-------------|
| 2009/10 | 4,677,510 | | 4,612,852 | | -64,658 |
| 2010/11 | 4,700,881 | 0.50% | 4,612,852 | 0.00% | -88,029 |
| 2011/12 | 4,989,250 | 5.78% | 4,612,852 | 0.00% | -376,398 |
| 2012/13 | 5,206,612 | 4.17% | 4,794,351 | 3.79% | -412,261 |
| 2013/14 | 5,164,509 | -0.82% | 5,040,805 | 4.89% | -123,704 |
| 2014/15 | - | - | 4,923,348 | -2.39% | - |

The pressures have arisen due to the Authority not providing for the inflation which the Service Provider is entitled to levy each year under the contract in line with the retail prices index, energy price increases (6.8p per kwh in 2009/10 rising to 10p per kwh today) and change programme savings targets of £100,000 in 2012/13 and £195,000 in 2013/14.

The annual shortfalls have been met through client side efficiencies, the use of central contingencies to pay for energy price increases and through the service provider introducing operational savings measures in response to the change programme targets set by the Authority.

2.1.4 Operational Savings Programme

In 2010, HM Treasury set up an Operational Savings Review of PFI schemes across the Country. North Tyneside Council became a pilot authority for the operational savings review for Street Lighting PFI's and has been working with the Department for Transport (DfT), Local Partnerships, Newcastle City Council and SSEC to identify and deliver operational savings from the PFI Contract since 2011.

Initiatives have included:-

- replacement of all illuminated bollards in the Borough with reflective ones,
- removal of the need to carry out a separate street lighting customer satisfaction survey,
- the introduction of dimming to the 10,700 street lights in residential estates as approved by Cabinet in January 2014,
- an energy reduction scheme on the Coast Road completed in March 2014 that has cut energy consumption on this road by 25%, and
- the replacement of many of the remaining orange glow street lights in the Borough with more energy efficient white lights.

Annual savings are reported by comparing the forecast Unitary Charge payments for the year at the start with the actual Unitary Charge outturn at the end.

| Year | Starting Forecast | Actual Outturn | Operational Saving |
|-----------|-------------------|----------------|--------------------|
| 2012 / 13 | £5,375,117 | £5,206,612 | £168,505 |
| 2013 / 14 | £5,429,634 | £5,164,509 | £265,125 |

2.1.5 Forecasting Unitary Charge forward

In the current financial year the service faces a change programme savings target of £148,000; this arises largely as an outcome of the need to repay the SALIX loan (discussed below). If the target was not built in then the SALIX loan repayments would be borne corporately by other council services which is not the intention. The unitary charge has also increased by 3% inflation. The energy price will be market tested and the price is likely to increase beyond 10p from 1 September.

The Authority borrowed £500,000 from SALIX to fund the residential estates lamp change and dimming programme. This SALIX loan is interest free but does need to be paid back over a four year period at £125,000 per annum. SSEC have indicated the SALIX loan will be covered by their share of savings if there are insufficient savings on the Authority side.

Taking into account the impact of the initiatives that have been implemented or are currently been installed (as set out in 2.1.4 above) and then making the following assumptions:

- the average energy price for the 2014/15 works out at 10.5p and then increases by 1p per annum.
- General inflation is 2.5%
- The Part Night Switch Off Scheme is installed by 31 December.

The table below shows the predicted unitary charge going forward with no further actions taken and with the impact of the Part Night Switch Off scheme. The table does not take account of maintenance savings that SSEC can introduce as columns are added to the Central Management System.

| Year | Unitary Charge "as-is" | Unitary Charge with Part Night | Difference |
|-----------|------------------------|--------------------------------|------------|
| 2014 / 15 | £5,163,519 | £5,118,054 | £45,465 |
| 2015 / 16 | £5,340,278 | £5,140,983 | £199,295 |
| 2016 / 17 | £5,571,828 | £5,323,953 | £247,875 |
| 2017 / 18 | £5,805,727 | £5,538,022 | £267,705 |

On these inflationary assumptions the unitary charge would remain above the available budget set out in 2.1.3 above. The service continues to face demanding pressures.

2.1.6 The current financial year 2014/15

The part night switch off scheme is the main element in the plan to meet these demanding pressures in 2104/15. Other elements include the recently completed energy reduction scheme on the Coast Road and the replacement of many of the remaining orange glow street lights in the Borough with more energy efficient white lights.

As this scheme will be introduced during the year the full year effect of the savings will not be realised until 2015/16.

Officers are also working on other options with the service provider to make further efficiency and energy savings to bridge the gap between the predicted unitary charge going forward and available budgets. An example of this is the investigation of LED technology. Pursuing a range of schemes and initiatives with the PFI service provider should enable Street Lighting to achieve its revenue savings targets and better meet its cost pressures going forward into future years.

2.2 Legal

The implementation of any recommendations approved by Cabinet must be undertaken in accordance with the terms of the Street Lighting PFI Project Agreement dated 31 March 2004 and made between the Council of the Borough of North Tyneside, the Council of the City of Newcastle upon Tyne and the PFI Contractor, Tay Valley (Newcastle and North Tyneside) Limited, and in accordance with the Financial Regulations and Contract Standing Orders of the Authority and applicable procurement regulations.

The PFI Contractor, Tay Valley (Newcastle and North Tyneside) Limited, sub contracts the delivery of the service to SSEC. SSEC are the Service Provider.

2.3 Consultation/community engagement

Consultation was undertaken with council officers.

Recent consultation seeking resident's views has included:

- During October 2012 as part of the public engagement carried out, there was a street lighting public meeting and walking tour in the Wallsend area.
- In January and February 2013 as part of the budget consultation nine events relating to street lighting were carried out with residents and staff.

This consultation indicated the majority of residents were happy for the Authority to implement appropriate dimming and part night switch off schemes.

Under recommendation 2 in paragraph 1.5.6 above, residents and local businesses will be asked for feedback on the scheme after it has been installed and operating for 3 months.

Officers originally met with Northumbria Police on 24 April 2012 to discuss options for street lighting energy saving including elements of this part night switch off scheme in non residential areas across the borough.

Officers have recently consulted Northumbria Police on the full scheme proposed in this report and listed in appendix two and met with Chief Superintendent Steve Neill at Middle Engine Lane area command on 25 March. The Police are broadly supportive of this scheme provided that it is Mayflower controlled so they can request the Authority to leave / turn on lighting in any areas covered by the scheme that they fear may become crime hot spots or in response to road traffic accidents or other public safety incidents.

2.4 Human rights

There are no direct issues relating to human rights arising from this report.

2.5 Equalities and diversity

There are no direct issues relating to equalities and diversity arising from this report.

2.6 Risk management

The PFI aimed to reduce crime and fear of crime through brighter illumination of streets at night. There is therefore a small risk that fear of crime or actual crime may increase for some residents and businesses when columns are turned off. This risk is minimised as the columns identified for part night switch off are away from residential areas and through the use of Mayflower Central Management control. This will enable the Authority to very quickly and flexibly change the part night switch off regime on an individual column by column basis in response to concerns raised by residents; local businesses; ward Members or the Police.

2.7 Crime and disorder

Currently there is a lack of research into the long term impact of part night switch off on crime and safety.

In relation to the trial of part night switch off on the A189 dual carriageway, there has not been an increase in road accidents since the trial started in May 2012.

The use of Mayflower Central Management control will enable the Authority to leave/turn on lighting in any areas covered by the scheme in response to instructions or requests from Northumbria Police.

2.8 Environment and sustainability

In 2013 Street lighting accounted for nearly a quarter of the Authority's total carbon footprint (22%). It is anticipated that this part night switch off scheme will reduce energy consumption by 1.3 million kilowatt hours per annum – an annual reduction of 702 tonnes of CO₂. Following on from the 2,784 tonnes of CO₂ being saved each year as a result of the bulk lamp replacement and 'trimming and dimming' programme in residential estates adopted following Cabinet's approval on 13 January 2014, this is a combined saving of over one third from the Authority's street lighting related carbon emissions.

PART 3 - SIGN OFF

- Deputy Chief Executive

- Mayor/Cabinet Member(s)

- Head of Service

- Chief Finance Officer

- Monitoring Officer

- Strategic Manager - Strategic Services