

Cabinet

17 July 2013



Updated Street Lighting Policy

Key Decision NS/21/13

Report of Corporate Management Team

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**Councillor Brian Stephens, Cabinet Portfolio Holder for
Neighbourhoods and Local Partnerships**

Purpose of the Report

- 1 To seek approval for consultation to commence on the revised Street Lighting Policy.
- 2 The change in the Street Lighting Policy supports the Street Lighting Energy Reduction Project which generates major savings that are being used to meet the Medium Term Financial Plan whilst retrofitting existing street lighting lanterns and reducing carbon emissions.

Background

- 3 The Council has faced unprecedented reductions in Government grants since the 2010 Comprehensive Spending Review to the extent that it is now forecasted that Government support for the Council will over the six-year period 2011-2017 reduce by £139m. This equates to a 36% reduction in Government support.
- 4 As a result, the MTFP forecast requires the Council to deliver total savings of £188m in the six-year period 2011/12 to 2016/17 and these are estimated to exceed £200m by 2017/18.
- 5 The Council is also required to reduce its carbon emissions by 40% by 2015 as part of the Council's wider Carbon Management Programme.
- 6 Cabinet, at its meeting on 12th December 2012, approved the business case for the Street Lighting Energy Reduction Project which sets out the scope of the project, which is to achieve energy reduction through a combination of:-
 - Retrofit with more energy efficient light sources
 - Removal of unnecessary lighting
 - de-illumination of signs
 - Use of Central Management System or fixed settings to facilitate dimming

- 7 The business case indicates that the Street Lighting Energy Reduction Project achieves net total savings of £24 million in today's prices and £55 million taking into account inflation over a 25 year period.
- 8 The business case also confirms that street lighting represents 18% of the Council's total carbon emissions of 105,816 tonnes (2008/09 baseline) and therefore reducing street lighting energy consumption is essential if the Council it to meet its target.
- 9 The Council's Street Lighting inventory on the adopted highway is summarised as follows:

Street Lighting	Units	2008/09 Baseline Carbon Emissions (Tonnes)	2012/13 Electricity Consumption – Kwh	2012/13 Electricity Cost	2012/13 Maintenance Costs
Street lighting	81,931	18,512	35,090,651	£3,594,841	£2,319,968
Externally Illuminated Signs	6,345	309	585,764	£59,761	£111,658
Internally Illuminated Signs	111	3	6,049	£733	£1,968
Bollards	879	51	109,078	£10,999	£25,824
Total	89,266	18,875	35,791,542	£3,666,335	£2,459,417

- 10 The current and original Street Lighting Policy was approved on 26th May 2010.

Updated Policy

- 11 The updated Street Lighting Policy is detailed in Appendix 2.
- 12 The updated policy details where the Council will provide and maintain street lighting on the adopted highway and to what standard subject to available funding. This is consistent with British Standards.
- 13 The need for street lighting varies by location. Therefore the level and standard of lighting provided will be dependent on a number of factors. In accordance with national standards each locality is placed into one of four Environmental Zones:
 - Zone E1 : National Parks, Areas of Outstanding Natural Beauty, Sites of Special Scientific Importance and other Dark Areas
 - Zone E2 - Areas of Low District Brightness (Rural Locations outside Zone E1)
 - Zone E3 - Areas of Medium District Brightness (Urban Locations)
 - Zone E4 - Areas of High District Brightness (urban Centres with high night-time usage)

These zones will be used to determine the suitable level and type of street lighting that is required in an area.

14 The main changes to the updated policy are detailed below:

Retrofit Existing Street Lights

- 15 A lot of the existing apparatus across the County is aged and would benefit from replacement. Over recent years there has been technological improvement in the energy efficiency and quality of light sources such as Light Emitting Diodes (LEDs). This provides us with the opportunity to retrofit aged apparatus across the County with up to date energy efficient apparatus that will produce savings in both energy and maintenance costs.
- 16 For illustration purposes an existing street light consumes 90 Watts compared to an LED street light that consumes 30 Watts for the same light output. This is a saving of 66%. This significant reduction in energy consumption will greatly reduce the Council's exposure to increases in energy costs.
- 17 The replacement of aged apparatus will also avoid or deter significant lifecycle replacement costs that are not currently budgeted for.
- 18 Officers have appraised all the 95,252 units in terms of technical and financial feasibility and it is considered that 45,407 units will be retrofitted in residential areas across the County.
- 19 LEDs have been in development for several years and manufacturers are now prepared to offer long term warranties on performance and energy consumption. This mitigates performance and energy consumption risks and enables the Council to proceed with confidence.

Additional Information

- 20 Some existing street lights on traffic routes in rural areas between towns and villages are unnecessary and can be removed. The updated policy permits the removal of street lighting where it is not specifically required by the Policy. The removal of any street light is subject to a risk assessment. This assessment is based on road safety and fear of crime. Street lights will only be removed if it is safe to do so.
- 21 The street lights that are not required by the Policy are mainly those on link roads with a de-restricted speed limit between settlements in rural areas. We estimate that there are 7,000 street lights that are not required by this Policy in County Durham. These lights are not required by statute or under British Standards and similar roads are not usually lit in other areas of the North East and the rest of the United Kingdom.
- 22 Local Members will be consulted on the proposed removal of any street light and will be provided with details and locations of any street lights identified for possible removal.
- 23 No street lights will be removed in residential areas.

- 24 The updated Policy introduces two-stage dimming as follows:
- 10.00 p.m. to 12.00 a.m. : 25% dimming downwards
 - 12.00 a.m. to 5.00 a.m. : 50% dimming downwards
- 25 The above reflects the reduction in road traffic flows and pedestrian activity late in the evening and early in the morning. However, it will still provide an acceptable level of lighting. Trials have shown that dimming at these levels is usually not perceptible to the human eye. Indeed the Council has dimmed traffic routes by 25% for several years and no complaints have been received.
- 26 Although there is the potential to switch off street lighting during the above mentioned hours rather than dimming, the savings over and above dimming are relatively low. Therefore after taking into consideration road safety and fear of crime a decision was made not to switch off street lighting completely during these hours.
- 27 There is also some potential to de-illuminate signs based on recent changes to Department for Transport regulations.
- 28 The above changes will help facilitate the Street Lighting Energy Reduction Project which was approved by Cabinet on 12th December 2012. The net total savings from the Project over 25 years are £24 million in today's prices and £55 million taking account of inflation.

Consultation

- 29 The updated policy will be subject to public consultation.
- 30 An engagement plan has therefore been drafted that was agreed by the Consultation Officer Group. Subject to approval of the recommendations in this report, the planned mechanisms include a county-wide survey which will explain the rationale behind the policy intentions and outline the approach to implementing them. There will also be a series of focus groups arranged with the Area Action Partnerships and a session with the Disability Partnership.
- 31 The activities carried out, and the results of the consultation, will be included in a consultation summary document and used to inform a future report on the policy implementation.
- 32 Work is also being undertaken to ensure that future communications to both Elected Members and residents on the changes taking place as a result of the dimming and removals processes are effective. This will include briefings with Local Members and updates in Member newsletters and information to local residents where removal of installations will be taking place.

Conclusion

- 33 Although this project will require capital investment it will produce a very strong financial return in the form of revenue budget savings that significantly exceeds the prudential borrowing costs by a ratio of 2.07:1. The net total savings over 25 years are £24 million in today's prices which equates to £55 million when taking account of inflation.
- 34 In addition the proposed investment also produces significant non quantified benefits in terms of lifecycle cost avoidance whilst reducing the Council's energy consumption and carbon emissions.
- 35 The project will also reduce annual energy consumption thereby reducing the Council's exposure to increases in energy costs.
- 36 Approximately 45,407 of the 95,252 units will benefit from improved LED technology with the potential to retrofit the remainder of the inventory over time as the cost of LEDs reduces further.
- 37 The dimming of street lighting by up to 50% will generally not be perceivable to the human eye. In addition no street light will be removed in a residential area. This will minimise any potential impact on residents.

Recommendations and Reasons

- 38 Cabinet is asked to consider the proposed changes to the Street Lighting Policy which will be subject to a public consultation exercise prior to a final decision being made on the revised policy.

Background Papers

- Street Lighting Energy Reduction Project : Cabinet Report dated 12 December 2012
- Street Lighting Policy : Current and original Policy approved on 26 May 2010

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Appendix 1: Implications

Finance

The updated Policy will help facilitate the Street Lighting Energy Reduction Project which was approved by Cabinet on 12th December 2012. This project will deliver significant financial savings that will help meet the MTFP.

Staffing

Not applicable

Risk

A corporate risk assessment has been carried out and no reportable risks were identified. Street lighting will continue to be provided in accordance with British Standards by the updated Policy. Where street lighting is not required by the updated Policy it will be removed subject to a risk assessment based on road safety and fear of crime confirming that it is safe to do so.

Equality and Diversity / Public Sector Equality Duty

An EqIA has been completed and is attached as Appendix 3

Accommodation

Not applicable

Crime and Disorder

Street lighting helps reduce the fear of crime.

Human Rights

Not applicable

Consultation

There will be a public consultation of 12 weeks if approved by Cabinet.

Procurement

Not applicable

Disability Issues

Not applicable

Legal Implications

The Council has the power but not a duty to provide street lighting under the Highways Act 1980.