

STOCKTON-ON-TEES BOROUGH COUNCIL

CABINET RECOMMENDATIONS

PROFORMA

Cabinet Meeting31st October 2013

1. Title of Item/Report

Street Lighting - Invest to Save Opportunities/Benefits

2. Record of the Decision

Consideration was given to a report on Street Lighting – Invest to Save Opportunities / Benefits.

The Medium Term Financial Plan (MTFP) reflected a significant reduction in Government Funding over recent years, and provided the Council with a significant financial challenge. In order to tackle this there were three big ticket items, one of which was Waste and Energy. As part of this it was being considered how the Borough's street lighting can be transformed in order to reduce the energy/maintenance costs associated with it.

The report detailed the need for and implications of investment in the energy efficiency of the street lighting stock. The need for change within the street lighting service was made more pressing by the significant budgetary pressures facing the Council, with on-going maintenance costs and anticipated increases in energy prices coupled with the need to secure energy efficiencies to reduce carbon emissions all significant driving factors. It was also necessary to improve the condition of some of the street lighting stock to meet the public and political expectations in relation to street lighting standards.

The biggest financial expenditure associated with street lighting was the cost attributed to the amount of energy that was consumed. Based on the performance of the existing lighting stock and predicted energy price increased energy consumption costs associated with street lighting were expected to increase by in excess of £418,000 per year by 2021. Historically, street lights within the Borough had used a combination of high and low pressure sodium lanterns but these consume significantly more energy than other viable alternatives. The mass replacement of lanterns and, where necessary, lighting columns, would result in significant savings in energy consumption and ongoing maintenance costs.

Lighting levels were determined via criteria laid down in the British Standard, with traffic flow, crime levels and night time activity all taken into consideration. In many streets, this could be achieved by replacing ageing lights with new energy efficient equipment incorporating technology which dims the lamp burning hours. A project to replace approximately 8,000 street lights had been completed in the Borough, reducing the total energy cost by approximately £200,000 a year.

In response to the increasing energy and maintenance costs associated with the street lighting service, a business case had been produced detailing a large-scale project which would involve a mass lantern replacement programme spread over a number of years and utilising modern Light Emitting Diode (LED) technology.

LED's utilise white light at various intensities and at very low wattage levels, offering greater energy efficiency to significantly reduce the amount of energy consumption associated with street lighting. Long life was also a key benefit when utilising LED's, with some having an operational life expectancy of 100,000 hours. This equated to eleven years of continual operation, or twenty years of 50% operation compared with a life expectancy of four and five years respectively for the traditional lamps that were used. As such, traditional lamps required far more human involvement and incur greater costs over an average LED unit lifetime.

A further benefit arises from the LED light source unit being made up of many different light source elements, making it extremely unlikely that it would suffer a total light outage and therefore significantly reducing routine maintenance issues / costs and the need for a robust and ultimately costly monitoring system.

In addition to mass lantern replacement, it was also proposed to replace light columns where appropriate. This would be undertaken using a risk-based approach, on a street by street basis with replacement depending on a range of criteria including column age, condition and location.

Climate change was described as one of the biggest challenges mankind had ever faced and carbon dioxide was one of its main causes. As an energy user and a community leader Stockton Borough Council had an important role to play in reducing its own carbon emissions and setting an example for others to follow.

If the scheme was successful in gaining Cabinet's approval an Implementation and Communication Plan would then be formulated and presented to Cabinet at a later date. In addition, a revised Stockton

Borough Council Street Lighting Policy document was being drafted detailing future direction in this field, which would also be presented at a Cabinet meeting for approval.

It was proposed to fund this replacement scheme by utilising Council reserves established for the specific purpose of funding 'invest to save' schemes. The savings generated by undertaking the replacement detailed in the aforementioned paragraphs would significantly reduce both the energy and maintenance costs attributed to street lighting, which would ultimately result in a shorter payback period.

RESOLVED that:-

1. The principle of invest to save in Councils street lighting stock in order that the preferred option of replacing all lanterns with LED, and replacement of columns over 25 years old, be approved.

2. An updated Street Lighting Policy and Implementation / Communication Plan be brought to a future meeting.

3. Different options of delivery be considered as part of the procurement process.

4. The request for funding to support the scheme totalling £14,000,000 as set out in paragraph 14 and shown in Appendix B be noted. This will be considered by Council as part of the 2014/15 budget setting process.

3. Reasons for the Decision

Approving the principle of the invest to save process will enable mass lantern / column replacement works to be undertaken to ensure significantly reduced energy and maintenance costs associated with the street lighting service are forthcoming.

4. Alternative Options Considered and Rejected

None

5. Declared (Cabinet Member) Conflicts of Interest

None

6. Details of any Dispensations

N/A

7. Date and Time by which Call In must be executed

Midnight on Friday, 8th November 2013

Proper Officer
04 May 2013