ROTHERHAM BOROUGH COUNCIL – REPORT TO CABINET

1.	**Meeting:**	**Cabinet**
2.	**Date:**	**16th January 2014**
3.	**Title:**	**Street Lighting - Residential 'Invest to Save' Initiative**
4.	**Programme Area:**	**Environment and Development Services**

5. Summary

5.1

The report seeks approval from Cabinet for a proposed 'invest to save' initiative in residential Street Lighting. The report was presented and the proposals supported by SLT at a meeting on 9th December 2013.

Under the Council's constitution (app 9, scheme of delegation, page 9), this is a key decision; all key decisions are to be made by Cabinet.

The definition of a key decision, in the constitution, is:

(b) any decisions that will result in income, expenditure or savings with a gross effect of £500,000 or greater (whether or not the item has been included in the relevant approved budget and including the provision by the Council of cash flow funding to third parties)

6. Recommendations

6.1 It is recommended that Cabinet approve the proposed Street Lighting Residential 'invest to save' initiative outlined in this report.

7. Proposals and Details

As part of the Council's strategy for Street Lighting, new technology and products are monitored and advantage taken, whenever possible, to improve the quality of light provided whilst minimising the associated environmental impact.

The use of LED technology is already prevalent in Street Lighting and the Council has a programme of investment to replace around 6,000 lighting units on main and arterial routes. There is a further opportunity to utilise this technology to reduce the energy used in Street Lighting whilst providing quality lighting that may prove relatively maintenance-free in the long term. Manufacturers are claiming that LED units should have a life span of around 20 - 25 years.

There are approximately 28,000 street lighting units on residential roads and at present around 15,000 have been replaced with compact fluorescent lighting units. These compact fluorescent units provide energy-efficient, white light, but the remaining 13,000 units have low pressure and high pressure discharge lamps installed which are far less efficient in comparison to current technologies that are available.

It is proposed to replace the 13,000 residential units with LED lighting units to offer further efficiencies in both the energy consumption and what should be a 20 year maintenance-free lighting installation. Initial costs of residential LED units were such that installations were prohibitive, but costs have now reduced to a level where these units are a viable option.

Initially it is proposed to leave the 15,000 compact fluorescent units in situ and concentrate on replacement of the 13,000 discharge lights. The average energy saving for each replacement will be around 45 watts which will give an overall saving on completion of the programme of 2,424,825 Kwh/annum. Multiplied by £0.10 per Kwh = £242,483 in energy savings.

8. Finance

The cost of each residential LED fitting is currently over £200, but it is thought that a tendering exercise would reduce this to around £170 / unit. Therefore the capital cost (to purchase lanterns only) would be £2.21 million based on 13,000 residential columns.

However, part of this capital cost will be offset by the current capital investment (funded by prudential borrowing) to replace 7,000 'at risk' columns with new installations (column and lantern) which currently uses a PLL (compact fluorescent) lamp as a standard fitting, with an LED fitting. This would mean an additional requirement of £90 per column.

Therefore, the net effect of the proposal would mean an additional £1.65m prudential borrowing requirement with expenditure being incurred in the period 2014/15 – 2016/17 inclusive and profiled at £550k per year.

At 2012/13 prices the estimated net electricity savings after taking account of the prudential borrowing costs are shown below:

2014/15	2015/16	2016/17	2017/18	Total
37,046	39,578	40,265	3,907	120,795

9. Risks and Uncertainties

The figures for future energy costs are not known at present, however judging by the energy markets at present, it is thought they will increase. The effect of any increase is not included in the financial modelling however the installation of the more efficient lights will help improve the Council's overall position either by delivering cashable savings or by mitigating against the increased energy charges through 'avoided costs'.

As technology is moving forward at such a pace, more energy efficient units may become available in future years.

Manufacturers may not be able to meet demand for units in the quantities required, especially as other authorities are looking to install LED technology.

10. Policy and Performance Agenda Implications

The proposals would support corporate policies:

Helping to create safe and healthy communities

- Providing safer and well maintained roads

Improving the environment

- Reducing CO2 emissions and lower levels of air pollution
- Promoting sustainable development

11. Background Papers and Consultation

Rotherham MBC Budget Proposals 2013-14.

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