
ENERGY EFFICIENCY STREET LIGHTING PROJECT FUNDING

1.0 EXECUTIVE SUMMARY

- 1.1 On 17th December 2015, Policy and Resources Committee considered and approved the business case for an innovative lighting project, based on a financial model of the existing energy costs inflated year on year and the costs that would be incurred if no action was taken (avoidable costs). The proposal will consist of the council's 14000 street lights being replaced with LED energy efficient luminaires. Changing the luminaires will reduce the amount of energy required for the lighting, the energy savings being reinvested to fund the loan charges associated with the capital borrowing required to carry out the works.
- 1.2 The December report and business case outlined that the delivery of the 'works element of the project' would be provided by the most cost effective model using either a contractor from a framework which will be available in late summer via Scotland Excel or via direct delivery depending on which option is most cost effective.
- 1.3 The business case concludes that the council should progress with replacing the existing luminaires (the lanterns on top of the lighting columns) with LED units and also replace lighting columns with the balance of the savings generated from reduced energy consumption. These improvements which are to be funded from the energy savings will free up revenue to service capital loan charges required to finance the project. It was also agreed that £150,000 of the savings is surrendered to contribute towards service choices.
- 1.4 Since the business case was approved, Strategic Finance and Roads and Amenity have received an offer from Salix for a £400,000 interest free loan subject to the installation of approximately 2200 luminaires by November. Salix Finance Ltd. delivers 100% interest-free capital to the public sector to improve their energy efficiency and reduce their carbon emissions. Salix was established in 2004 as an independent, publicly funded company, dedicated to providing the public sector with loans for energy efficiency projects. The interest free loan from Salix of £400,000 for 8 years will reduce the borrowing costs in respect of the project by £160,000 and this will allow more prudential borrowing to be undertaken from the same level of savings, allowing more defective columns to be replaced.
- 1.5 It is recommended that:
- The Council approves the use of the Salix funding;

- The Council agrees that, in order to meet the timescales, the first phase of the lighting project is delivered by internal resource;
- The Council agrees that the additional saving on borrowing will be used to borrow more capital in order to allow replacement of more columns.

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2.0 INTRODUCTION

- 2.1 Street lighting energy costs the council approximately £700,000 per year at current rates. Over the next 10 years energy costs are predicted to double to approximately £1,500,000 if we do nothing to reduce the amount of energy consumed. On 17th December 2015 the Policy and Resources Committee approved the business case for this innovative lighting project, based on a financial model of the existing energy costs inflated year on year and the costs that would be incurred if no action was taken (avoidable costs). The project replaces existing street lighting luminaires with energy efficient LED units.
- 2.2 The council has an obligation to reduce its carbon consumption by reducing energy. Reducing street lighting energy is considered to be one of the most effective methods of reducing carbon consumption and reducing energy costs.
- 2.3 The original business case assumed that the project would be funded through prudential borrowing. Since approval of the business case an offer of a £400,000 interest free loan from Salix has been made to the Council. This funding comes with a condition that works funded by this loan are completed by November this year.

3.0 RECOMMENDATIONS

- 3.1 It is recommended that:
- The Council approves the use of the Salix funding;
 - The Council agrees that, in order to meet the timescales, the first phase of the lighting project is delivered by internal resource;
 - The Council agrees that the additional saving on borrowing will be used to borrow more capital in order to allow replacement of more columns.

4.0 DETAILS

- 4.1 The Scottish Futures Trust has developed a financial model for the evaluation of Street Lighting within the public sector. The model uses current forecasts from the Department of Energy and Climate Change (DECC) to predict future energy costs and potential savings. This model also uses costs and performance figures for LED luminaires from the Scotland Excel framework, and indicates potential financial savings available when converting to energy efficient lighting.
- 4.2 The table below is a summary of results from the Scottish Futures Trust financial model that formed part of the business case and this assumes a contribution of £150k is made towards Service Choices.

Summary of estimated first year savings (see appendix D)	£'000
Estimated saving on electricity costs	472
Debt Servicing cost on £3.9m luminaire replacement	269
Anticipated saving	203
Contribution to Service Choices	150
Remaining unallocated saving	53

The total cost for supply and fitting of 14,090 luminaires is estimated at £3.9m.

The saving resulting from the replacement of luminaires with energy efficient units provides the council with an opportunity to replace defective columns.

The approved business case assumed that the £53,000 of unallocated savings would be used to fund prudential borrowing.

Using the mid-range figure of £1,400 per column enables 25% of the estimated 2,000 defective columns identified in the independent column condition survey to be replaced giving a cost of £750k.

The total investment amounts to £4.6m.

- 4.3 Approval has been given for the following:
- Progress with an innovative lighting energy efficient scheme as detailed in this business case, the costs of which are summarised in 5.4 of this report, in order to reduce future cost pressure relating to street lighting electricity.
 - A tender process being completed and that the energy efficient scheme is progressed utilising the most cost effective model as determined from the tender process.

- The remaining reduced electricity budget, as a result of the innovative lighting scheme, is inflated in line with energy costs on an annual basis.
- The balance of savings generated is used to fund a column replacement program with replacements being prioritised on condition.

- 4.4 Resource has been recruited through a framework contract for a lighting designer to progress the LED lighting design.
- 4.5 Strategic Finance and Roads and Amenity have received an offer from Salix for £400,000 on an interest free loan subject to the delivery of approximately 2200 luminaires by November. Salix Finance Ltd. delivers 100% interest-free capital to the public sector to improve their energy efficiency and reduce their carbon emissions. Salix was established in 2004 as an independent, publicly funded company, dedicated to providing the public sector with loans for energy efficiency projects. The interest free loan from Salix of £400,000 for 8 years will reduce the borrowing costs in respect of the project by £160,000. This will allow the saving on borrowing to be used to borrow more capital which will enable the service to replace more columns.
- 4.6 There are two parts to the project, the purchase of goods/materials and the works to install them. The purchase of goods/materials would continue as originally envisaged in the business case via the Scotland Excel contract. In order to deliver the units within the timescale set by Salix however, it would be necessary to commence the project before the tendering exercise for works, to compare the cost of using internal or external resources (a make or buy exercise) is completed. It is proposed that the start of the lighting project is accelerated with an initial phase, equal in financial value of the £400,000 available through Salix being delivered by in-house resource. There is nothing to prevent the Council opting to install a proportion of the luminaires (approximately 15%) using its internal resources and the savings in interest are expected to be greater than the loss of any potential savings that could be achieved through the make or buy exercise. The remainder of the project being delivered by the most cost effective method (either through the Scotland Excel contract or via in house resource depending on which is most cost effective).

5.0 CONCLUSION

- 5.1 Following an offer from Salix for an interest free loan of £400,000, which is time limited, to invest in energy efficient lighting it is proposed that an initial phase of the luminaire replacement is carried out with internal resource to the value of the available interest free loan. The remainder of the project being delivered by the most cost effective method (either through the Scotland Excel contract or via in house resource depending on which is most cost effective).

6.0 IMPLICATIONS

6.1	Policy	None known
6.2	Financial	As detailed in the report
6.3	Legal	None known
6.4	HR	None known
6.5	Equalities	None known
6.6	Risk	Not taking the Salix offer would increase the costs of the project. The contract costs for providing the luminaire replacements through the Excel contract will not be known until the framework contract is available later in the summer. However, the interest savings are expected to be significantly greater than any savings offered through the contract.
6.7	Customer Services	None known

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