

Transport and Environment Committee

10.00am, Tuesday, 28 October 2014

Stair Lighting – Energy Efficiency Proposal – referral from the Health, Social Care and Housing Committee

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| Item number | 8.1 |
| Report number | |
| Wards | All |

Executive summary

The Health, Social Care and Housing Committee on 9 September 2014 considered a report on a proposal to introduce new energy efficient lighting systems in 14,000 tenemental blocks of flats across the city. The Committee referred the report to the Transport and Environment Committee for information.

Links

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| Coalition pledges | See attached report |
| Council outcomes | See attached report |
| Single Outcome Agreement | See attached report |

Terms of Referral

Stair Lighting – Energy Efficiency Proposal

Terms of referral

- 1.1 On 9 September 2014, the Health, Social Care and Housing Committee considered the attached report by the Acting Director of Services for Communities on a proposal to introduce new energy efficient lighting systems in 14,000 tenemental blocks of flats across the city.
- 1.2 Replacing the existing light fittings and bulbs with a more efficient LED system could generate savings on existing costs of over 50% through reduced maintenance and electricity costs, as well as a reduction in carbon emissions.
- 1.3 It was projected that the work would take four years to complete (subject to the results of a procurement exercise) at an estimated capital cost of £9 million (£6 million for LED light fittings and £2.9 million in associated labour costs).
- 1.4 The project was not included in the Capital Investment Programme and thus requires Council approval to be taken forward.
- 1.5 The Health, Social Care and Housing Committee agreed:
 - 1.5.1 To seek approval from Council to procure a contract for the introduction of new energy efficient lighting systems in 14,000 communal stairs across the city.
 - 1.5.2 To note the final decision on the award of a contract would be taken by Council or the Finance and Resources Committee.
 - 1.5.3 To refer the report to the Transport and Environment and Finance and Resources Committees for information.
 - 1.5.4 To note that the Acting Director of Services for Communities would look at the possibility of including motion sensors or switches as part of the contract specification.

For Decision/Action

- 2.1 The Transport and Environment Committee is asked to note the attached report.

Background reading / external references

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Links

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|---------------------------------|---|
| Coalition pledges | See attached report |
| Council outcomes | See attached report |
| Single Outcome Agreement | See attached report |
| Appendices | Report by the Acting Director of Services for Communities |

Health, Social Care and Housing Committee

10am, Tuesday, 9 September 2014

Stair Lighting – Energy Efficiency Proposal

Item number

Report number

Executive/routine

Executive

Wards

All

Executive summary

The Council provides a stair lighting service to 14,000 tenemental blocks of flats in Edinburgh, serving up to 84,000 residents. This costs the Council approximately £2.1 million per year in energy and maintenance costs. The Council is currently the only local authority in Scotland that provides such an extensive stair lighting service to residents, free of charge.

On 18 March 2014, a presentation on the options for improving the energy efficiency of stair lighting by installing and fitting LED lighting systems, was discussed at the Transport and Environment Policy Development and Review Sub Committee. It was requested that a business case be developed to provide further details on the costs of an LED replacement programme. The outcome of which would be reported to a future Health, Social Care and Housing Committee.

This report advises that upgrading approximately 90,000 light fittings to LED on a 'spend to save' basis will generate savings on existing costs of over 50%, through reduced maintenance and electricity costs, as well as a reduction in carbon emissions.

Links

Coalition pledges

[P8, P50](#)

Council outcomes

[CO16, CO18, CO19](#)

Single Outcome Agreement

[SO4](#)

Stair Lighting – Energy Efficiency Proposal

Recommendations

It is recommended that Health, Social Care and Housing Committee:

- 1.1 Agrees to seek approval from Council to procure a contract for the introduction of new energy efficient lighting systems in 14,000 communal stairs across the city.
- 1.2 Notes the final decision on the award of a contract will be taken by Council or Finance and Resources Committee.
- 1.3 Refers the report to Transport & Environment Committee and Finance and Resources Committee for information.

Background

- 2.1 On 18 March 2014, a presentation on the options for improving the energy efficiency of stair lighting by installing and fitting LED lighting systems, was discussed at the Transport and Environment Policy Development and Review Sub Committee. It was requested that a business case be developed which considered the cost and viability of installing LED technology, the outcome of which would be reported to a future Health, Social Care and Housing Committee.
- 2.2. Most private housing developments, built since mid 1970, do not benefit from this free service. These newer developments pay for their stair lighting through factoring arrangements. The Council is currently the only local authority in Scotland, and possibly the UK, which provides free stair lighting to residents living in flats, accessed by communal stairs.

Main report

- 3.1 The stair lighting service costs the Council approximately £2.1 million each year. This is split between electricity costs of approximately £0.9 million and maintenance, bulb replacement and reactive repair costs of approximately £1.2 million.
- 3.2 Rather than replacing current bulbs with like for like, it is proposed to replace around 90,000 fittings and bulbs with more energy efficient lighting systems. This would lead to reduced energy and maintenance costs, as well as a reduction in carbon emissions.

- 3.3 A pilot installation in six stairs, containing 62 homes, was carried out and completed in July 2014. All those residents were asked to complete a questionnaire on the quality of the work and the level of light in the stair after the installation. To date 12% of the questionnaires issued have been returned, all of which reported 100% satisfaction with the installation and the quality of light.

Measures of success

- 4.1. The measures of success are:
- Reduced maintenance and replacement costs.
 - Reduced energy costs.
 - Reduced carbon emissions.
 - Customer Service Satisfaction.

Financial impact

- 5.1. The capital cost for upgrading the light fittings is estimated to be approximately £9 million (£6 million for LED light fittings and £2.9 million in associated labour costs).
- 5.2. It is projected that the work will take four years to complete, subject to the results of a procurement exercise. Following the completion of the upgrade it is estimated that the annual cost of the service will reduce by 52%, from £2.1 million to £0.9 million. The upgrade will achieve significant savings in both maintenance and energy costs. It is anticipated that maintenance costs will reduce from £1.2 million to approximately £0.4 million and energy costs will reduce from £0.9 million to approximately £0.5 million, based on current prices. This calculation does not take energy price inflation into account, so the financial benefit to the Council could be significantly higher.
- 5.3. Current analysis of the Energy Market predicts that costs will double over the next 10 years, therefore, without the upgrade it is anticipated that energy costs for stair lighting would increase to £1.8 million by 2025, compared to an anticipated £1.1million, following the LED upgrade. The upgrade could therefore deliver an additional savings of £0.7 million.
- 5.4. The capital costs required to fund the LED lighting upgrade would be met from prudential borrowing, borrowed over a period of 10 years. It is anticipated that the savings in running costs would meet the £1.2 million a year borrowing costs, over the term of the loan. In addition other funding options will be explored.
- 5.5. The current business case is based on the best available market information for the supply of such systems and the Council's current borrowing rate of 5.25%. This business case will be refined to reflect the results of the

procurement exercise and any changes to borrowing assumptions. The refined business case will be presented to Finance and Resources Committee for approval, along with the results of the procurement exercise.

Risk, policy, compliance and governance impact

- 6.1 As this project is not contained within the agreed capital programme approval from Council will be required to procure and thereafter to award the contract and agree the capital programme.
- 6.2 This policy will help contribute to the Council's target of reducing energy consumption in its own buildings by 20% by 2020, as set out in its Energy Policy approved at Transport and Environment Committee on 27 August 2013.
- 6.3 By improving the energy efficiency of existing homes, the LED light replacement programme also contributes to the Council's objectives identified in the Sustainable Edinburgh 2020 plan and its Homes and Energy Strategy.
- 6.4 The use of prudential borrowing to fund this programme will be subject to approval of Finance and Resources Committee and full Council.

Equalities impact

- 7.1 There are no negative equality or human rights impacts arising from this report.

Sustainability impact

- 8.1. The impacts of this report have been considered in relation to the Climate Change (Scotland) Act 2009 Public Bodies Duties. The proposals in this report will reduce carbon emissions. The installation of LED lighting systems would save approximately 2,100 tonnes of CO2 each year.

Consultation and engagement

- 9.1 The business case for installing LED light fittings has been produced in conjunction with Financial Services.
- 9.2 Consultation was carried out with the 62 residences within the pilot installation project. All residents were asked to complete a questionnaire on the quality of the work and the level of light in the stair after the installation.

Background reading/external references

[Climate Change \(Scotland\) Act 2009: Public Bodies Duties](#)

[Energy Policy, Transport and Environment Committee, 27 August 2013](#)

[Sustainable Edinburgh 2020 Annual Report, Corporate Policy and Strategy Committee, 10 June 2014](#)

John Bury

Acting Director of Services for Communities

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Links

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| Coalition pledges | P8 – Make sure the city’s people are well-housed, including encouraging developers to build residential communities starting with brown field sites. P50 - Meet greenhouse gas targets, including the national target of 42% by 2020 |
| Council outcomes | CO16 – Well Housed – People live in a good quality home that is affordable and meets their needs in a well managed Neighbourhood. CO18 – Green – We reduce the local environmental impact of our consumption and production CO19 - Attractive Places and Well Maintained – Edinburgh remains an attractive city through the development of high quality buildings and places and the delivery of high standards and maintenance of infrastructure and public realm. |
| Single Outcome Agreement | SO4 – Edinburgh’s communities are safer and have improved physical and social fabric. |
| Appendices | None |