

DECISION TITLE: Street light dimming
Peter Hiller, Cabinet Member for Strategic Planning and Commercial Strategy and Investments
Decision to be made January 2020
Deadline date: December 2019

Cabinet portfolio holder: Responsible Director:	Peter Hiller, Cabinet Member for Strategic Planning and Commercial Strategy and Investments Steve Cox, Director of Place and Economy
Is this a Key Decision?	YES If yes has it been included on the Forward Plan: YES Unique Key decision Reference from Forward Plan: KEY/06JAN20/04
Is this decision eligible for call-in?	YES
Does this Public report have any annex that contains exempt information?	NO
Is this a project and if so has it been registered on Verto?	NO

R E C O M M E N D A T I O N S

The Cabinet Member is recommended to:

1. Approve the introduction of a dimming trial, to be introduced immediately after signed approval of this document.
2. Approve the recommendation to adopt the dimming regimes if the phase one budget proposal is approved and the trial period is successful.

1. PURPOSE OF THIS REPORT

- 1.1 This report is for Councillor Peter Hiller to consider exercising delegated authority under paragraph 3.4.3 of Part 3 of the constitution in accordance with the terms of their portfolio at paragraph (d)

2. TIMESCALES

Is this a Major Policy Item/Statutory Plan?	NO	If yes, date for Cabinet meeting	N/A
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3. BACKGROUND AND KEY ISSUES

- 3.1 Since 2012 Peterborough City Council has been upgrading its street lighting stock to LED lanterns in order to achieve energy and carbon savings. Investment in the early years

allowed for between 1,000 and 3,000 lanterns to be replaced each year. More recently, in 2016, an aggressive £16million project commenced to upgrade the remaining stock (approximately 17,000 units). Now complete, the council maintains in the region of 25,000 LED street lights.

3.2 In addition to an energy efficient LED lantern, each new unit has been fitted with a node that communicates to a central management system. This system facilitates the remote control of each lantern and enables the council to operate dimming and switch off regimes. In addition to the control capabilities the management system can be used to highlight unusual energy usage and miscommunication patterns to identify faulty units and inform maintenance requirements.

3.3 Energy usage has reduced significantly since the installation of the LED units however the abilities of the central management system allow the council opportunities to reduce energy consumption further by dimming the level of light.

3.4 The council has recently declared a climate emergency with a commitment to being net-zero carbon by 2030. Whilst the conversion to LED has made carbon savings in itself the council can do more by implementing a regime of dimming. Furthermore the council is under extreme financial pressure to make revenue savings.

3.5 The proposed dimming regimes are detailed below:

- Residential lights (columns 6 meters in height and below) to be dimmed by 20% between the hours of 21:00 and 05:00.
- Traffic routes (columns greater than 6 meters in height) to be dimmed by 20% between 21:00 and 00:00 and 40% between 00:00 and 05:00.

It is recommended that the dimming regimes identified above are implemented on approval of this decision notice for a trial period ending on 31/03/2019. Assuming that the trial is successful and phase one of the budget proposal is approved it is proposed that the dimming regimes are fully adopted on 01/04/2019.

3.6 It is estimated that with the introduction of these regimes the council will save in the region of 649MWH which equates to a predicted saving of £100,000 annually. Using the 2019 Greenhouse Gas Emissions conversion factors this equates to 165 tonnes of CO₂.

3.7 Due to the improved quality of LED lights a reduction of 20% is not significant enough to be noticeable to the naked eye by the majority of people. A number of trials have been undertaken with both officers and councillors who have broadly observed that there is no significant difference to the lighting levels and the trials have been received positively. A number of other authorities have dimmed their lighting successfully with no issues and the above proposed regimes mirror those implemented by others.

3.8 The council will need to liaise with key stakeholders to ensure that areas of concern are either monitored or programmed with amended regimes as necessary and plans to do this prior to and during the trial period January 2020.

4. CONSULTATION

4.1 A demonstration of the dimming was offered to members of the cross-party budget working group - councillors Holdich, Seaton, Hiller, Lane, Sandford, Howell, Coles and John Fox. The demonstration was accepted by councillors Holdich, Howell, Coles and Lane on 18 October 2019. During this visit additional opportunities to view dimming were offered upon request. Cllr Coles accepted and further demonstration was arranged for 30 October 2019.

Cllr Sandford visited a dimming demonstration independently of council officers on 21 October 2019 and submitted comments that are currently being considered.

- 4.2 The council will liaise with key stakeholders such as the emergency services, disability groups and local transport providers to ascertain any specific areas of concern they may have and monitor, review and potentially amend dimming regimes that may be perceived to be unacceptable.

5. ANTICIPATED OUTCOMES OR IMPACT

- 5.1 It is anticipated that the proposed dimming regimes will be accepted and the council will realise the energy, carbon and financial savings detailed in section 3.6 above.

6. REASON FOR THE RECOMMENDATION

- 6.1 This proposal has been made following the council's declaration of a climate emergency and commitment to achieve net-zero carbon emissions by 2030 and a review of savings opportunities in order to contribute to the council's budget deficit.

7. ALTERNATIVE OPTIONS CONSIDERED

- 7.1 Alternative dimming regimes were considered but were ruled out because they were either too aggressive and not likely to be accepted or not aggressive enough to deliver sufficient savings.

8. IMPLICATIONS

Financial Implications

- 8.1 If this proposal is accepted it has been calculated that 649MWH will be saved equating to £100,000 reduction in energy costs and 165 tonnes of carbon

Legal Implications

- 8.2 There is no legal obligation to provide or maintain street lighting for the public highway. There is a legal obligation to maintain the structural and electrical integrity of assets that are erected and ensure they do not cause any health and safety risk to the public.
- 8.3 It is recommended that if an authority provides lighting on the highway that it is delivered to the correct British Standard. Residential lighting in Peterborough is currently designed to the minimum standard - when dimmed by 20% the lighting will be below standard.

- 8.4 The traffic routes are illuminated according to their peak traffic movements, outside of these periods they are currently over lit. The proposed dimming regimes on the traffic routes coincide with reduced traffic movements and therefore when dimmed will remain in line with the recommended British Standard.

Equalities Implications

- 8.5 A reduction of 20% is not noticeable to the human eye due to the increased quality of white light in comparison to the traditional orange lights the LEDs have replaced. It is therefore not considered that any one identified group will be affected disproportionately.
- 8.6 It may be perceived that the elderly and disabled may experience greater effects of the dimming however we shall liaise with key stakeholder groups prior to dimming and monitor data following implementation.

Carbon Impact Assessment

- 8.7 The proposal will have a positive impact on the implementation of the council's Environment Capital agenda and zero net carbon aspiration by 2030. The proposed dimming will see an annual reduction in energy usage of 649MWH and 165 tonnes of carbon production.

There will be a review with key stakeholders to identify areas that may require alternative approaches to dimming, either levels or time. This will ensure we are supporting the council's safe, cohesive and healthy communities priority.

9. DECLARATIONS / CONFLICTS OF INTEREST & DISPENSATIONS GRANTED

- 9.1 Declarations by any cabinet member consulted by the decision maker and any dispensation granted by the Audit Committee or Head of Paid Service (Chief Executive). Note, the Audit Committee grants dispensations where the member concerned has a pecuniary interest, whereas the Chief executive may grant a dispensation for these purposes to any cabinet member consulted on these proposals whether by an officer or another individual cabinet member where there is a common law conflict of interest that may not amount to a pecuniary interest under the Regulations.

10. BACKGROUND DOCUMENTS

- 10.1 None

11. APPENDICES

- 11.1 None