



Cyngor Castell-nedd Port Talbot
Neath Port Talbot Council

NEATH PORT TALBOT COUNTY BOROUGH COUNCIL

Environment, Regeneration and Street Scene Cabinet Board

14th November 2023

Report of the Head of Streetcare M. Roberts

Matter for Decision

Wards Affected: All Wards

Report Title: Street Lighting Energy

Purpose of the Report:

To seek Member approval for public consultation regarding potential savings strategies in relation to street lighting energy, relating to the dimming of LED lanterns and part night lighting.

Executive Summary:

The cost of energy to the Council has increased significantly and, despite an above inflationary increase in the funding allocation this year, the current street lighting energy budget of £1.4M is predicted to outturn £295K over budget. In addition to this, there is a significant budget gap predicted in the Council's budget next year, which would make any ongoing deficit very difficult to sustain. As such there is a need to consider potential savings strategies to reduce lighting energy costs if required.

This report seeks permission to undertake public consultation on the dimming of high wattage LED lights by 25% throughout the night where present across the County Borough, and/or switching off lighting in the small hours, between 01.00hrs and 05.00 hrs, in appropriate areas.

Background:

The cost of street lighting energy has increased significantly and, despite an above inflationary increase in the funding allocation this year, the current street lighting energy budget of £1.4M is predicted to outturn £295K over budget. In addition to this, there is a significant budget gap predicted in the Council's budget next year, which would make any ongoing deficit very difficult to sustain. As such there is a need to consider potential savings strategies to reduce lighting energy costs, to help inform the Council's emerging Medium Term Financial Plan.

Previous energy saving measures

Between 2012 and 2018, the Council undertook a large scale street lighting renewal project, which as well as replacing life expired columns, cables and lanterns introduced some energy efficiency measures including new fluorescent lanterns in residential areas with electronic switch gear and dimming. Subsequently, in 2020, the Public Lighting Section commenced a further SALIX funded project to replace high wattage sodium oxide and high pressure sodium lanterns with more energy efficient LED lanterns. During this project over 6000 lanterns were replaced with lower energy units. If the SALIX project had not been undertaken then at today's energy rate of 41p per kWh the Council's lighting energy bill would be a further £712,000 above the current energy costs.

In addition to above, in response to the significantly increased costs this year, Officers have already implemented the 'trimming' of 3 watts off the power levels for all lanterns, via the Council's central management system, given trials indicated this would make no discernible difference to lighting levels and would enable some immediate savings to be made to help the budget.

Further potential measures

Aside from switching some lighting off altogether, there are two further potential savings strategies that could be considered:

Increased dimming

There are currently 10,600 LED lanterns installed within the county borough which it is believed may be suitable for dimming up to 25% (i.e. significantly above the current 3 watt power reduction). This could be done all evening or within the small hours.

[The fluorescent lanterns in the borough, some 8500 55W PLL units largely in residential areas, are already under a dimming regime following previous investment and cannot be dimmed further.]

Part Night Lighting

As opposed to increased dimming, lights in many areas could potentially be switched off in the small hours. A proposal in this regard could include switching off up to around 14,000 lanterns during the hours of say 01:00 – 05:00hrs.

This report seeks approval to undertake public consultation on both these potential saving strategies including a list of potential locations for part night lighting as shown in Appendix A.

Financial Impacts:

Whilst any proposals would follow the public consultation, the order of potential savings would be as follows:

Dimming the output of LED Lanterns by 25% all night

An annual saving of up to £115,000.

Part Night Lighting where potentially suitable between 01:00 – 05:00hrs

An annual saving of up to £218,000.

Part Night Lighting where potentially suitable and dimming of LEDs elsewhere

An annual saving of up to £285,000.

[Note: All potential savings are modelled on a current energy cost of 41p/KWH.]

Integrated Impact Assessment:

The proposed consultation is to assist with completing an Integrated Impact Assessment of the potential savings strategies for inclusion with any future decision report.

Valleys Communities Impacts:

There is a potential for valley communities, as elsewhere in the County Borough, to be affected by the indicated potential saving strategies. The proposed consultation would help inform any issues in this regard.

Workforce Impacts:

Employees, as other citizens, may be affected by the savings strategies. The proposed consultation would help inform the potential impact on citizens generally.

Legal Impacts:

Further to guidance issued by the Institution of Lighting Professionals, the Council has a duty, once street lighting has been installed, to ensure such lighting is maintained.

Risk Management Impacts:

Part night lighting in particular could give rise to some increased exposure to potential claims from the public. One reason for conducting a public consultation exercise is to increase the understanding of issues and any areas where the savings strategies might not be suitable.

Any savings strategies which are ultimately implemented would reduce financial risk on the Council with future cost increases.

Crime and Disorder Impacts:

Crime, and fear of crime, are matters of public concern which the consultation would help provide better understanding in relation to potential street lighting saving strategies. The public consultation process would include specific consultation with the emergency services and internal sections in relation to road safety and CCTV.

Counter Terrorism Impacts:

There is not expected to be any impact on counter terrorism arising from the potential savings strategies but this, as with other potential impact areas, would be reviewed in light of consultation findings.

Violence against Women, Domestic Abuse and Sexual Violence Impacts:

Similarly to crime and fear of crime generally, the proposed consultation should help better inform any issues in this regard with respect to the potential street lighting saving strategies.

Consultation:

Public Consultation, to include specific consultation with the emergency services and relevant internal sections, is the subject matter of this report.

The proposed consultation would be undertaken by means of 'Online Polling' and also letter drops in strategic community areas such as libraries and community centres so that feedback can be given by residents who are not online. Furthermore, there would be direct correspondence with the emergency services. Consultation is proposed for 6 weeks.

Previous consultation with undertaken with regards to a dimming regime being implemented were carried out in 2015. These questions were asked to the public following a trial that had been carried out to see if residents had noticed the dimming and if they had any issue with the lighting that was present during these trials.

Such questions asked in the last consultation were:

1. Are you happy with the street lighting in your area?
2. Had you noticed that the lights had been dimmed?

3. Can you remember when the dimming started?

4. Did the dimmed lighting adversely affect you?

If yes – how?

5. In your opinion, as dimming saves money, would similar dimming be acceptable on other major traffic routes?

6. Any other comments?

Some of these questions couldn't be asked again in this instance as there has been no substantial trail carried out throughout the whole authority.

Possible other questions that could be asked in the consultation could be:

- Are you happy with the lighting in your area?
- Should Part Night Lighting be implemented between 01:00 and 05:00 in your areas, would this adversely affect you?
- In your opinion, as dimming lighting saves money, should dimming of LED's be implemented in your area.
- Following previous dimming regimes being implemented, do you think dimming the LED lighting in your area would adversely affect you? – If so how?
- Any other comments?

Note: The questions to be asked in the consultation can all be subject to change and addition of further should you feel it is necessary.

Recommendations:

It is recommended that Members approve that public consultation be undertaken with respect to the potential street lighting energy saving strategies as set out in this report.

Reasons for Proposed Decision:

To help inform any future decision regarding street lighting savings and associated Integrated Impact Assessment.

Implementation of Decision:

The decision is proposed for implementation after the three day call in period

Appendices:

None.

List of Background Papers:

None.

Officer Contact:

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