

ROTHERHAM BOROUGH COUNCIL

1.	Meeting:	Cabinet Member for Regeneration & Development
2.	Date:	9th August 2010
3.	Title:	Dimming of Street Lighting
4.	Programme Area:	Environment and Development Services

5. Summary

This report outlines the proposals for introducing the dimming of street lighting units.

6. Recommendations

That the dimming of street lighting is implemented as set out in the report in order to reduce the energy consumption and carbon emissions of street lighting.

7. Proposals and Details

As part of the street lighting strategy within Rotherham, new technology and products are monitored and advantage taken, whenever possible, to reduce the environmental impact of street lighting. In addition, rising energy prices have highlighted the need to be proactive in reducing energy consumption.

In December 2008, a report to cabinet members for the Economic Regeneration & Development Service outlined the intention of trialling dimming units in 3 gateway sites across the borough, namely Wortley Road, Kimberworth; Wath Road, West Melton and Ryton Road, North Anston. Benefits of this type of installation are that:-

- Less energy is used and CO₂ emissions are reduced
- The life of the lamp can be extended

These trials were implemented in early 2009 and consultation at the time showed that residents did not see any detriment to the lighting and did not have concerns over the reduced lighting levels. In addition units with the capability of dimming were also installed as part of major street lighting refurbishment works in Wath Town Centre. There are around 175 units in situ on these trial sites and it is now intended to inform adjacent residents and to resume the dimming of the units that are installed from 1st September 2010.

It is also intended to expand on these trial sites as part of the asset replacement programme where the wattage of the street lighting lamps is sufficiently high to allow dimming of a further 300 lamps per annum to be undertaken. This will generally be possible on the classified network and bus routes for example, where the reduction in flow of traffic at certain times allow reduced lighting levels to be utilised. The dimming will be introduced as the lighting units are replaced and again adjacent residents informed of our intentions.

The fitting of dimming units in these lanterns will have the effect of reducing the energy consumption for part of the night at pre set times. It is intended to reduce the power consumption by 50% for around 50% of the night to give an overall saving of 25%. As the energy consumption per lighting unit on the identified routes is approx £60 per annum (on these higher wattage sites), savings would be around £15 per unit installed per annum. The 175 units on the trial sites referred to above will save £817 this financial year, equivalent to £1400 per annum (these units are pre set to dim by 25%). The 300 units to be changed as part of the annual asset replacement programme will save around £5000 per annum commencing in 2011/12 (these units will dim by 50%).

The majority of new lamps being introduced as part of the asset replacement programme are across our residential neighbourhoods and are very low energy usage; as such it would not be cost effective to try to dim these. This is also applicable to higher wattage lamps that are not due for renewal, as the capital investment required to install dimming equipment is not considered economically viable due to a 4-5 year payback period.

It is anticipated that a press release will be issued shortly to inform the public of these energy saving proposals and give reassurance that the levels of lighting will continue to be in accordance with current guidance.

8. Finance

Fitting of this dimming gear will be accommodated within the capital funds available for the asset replacement works and when upgrading of street lighting equipment through Local Transport Plan funding.

Summary of energy savings

As is identified earlier, the 175 units in situ will save £817 this financial year and £1400 per annum from April 2011. The 300 units to be installed as part of the asset replacement programme will save around £5000 per annum from April 2011.

9. Risks and Uncertainties

There is a risk of public dissatisfaction which may arise from the use of variable lighting levels and dimming.

10. Policy and Performance Agenda Implications

Good street lighting supports the following Corporate Plan themes:

Alive – by providing a quality street environment and increasing after dark activity.

Safe – by ensuring the highway is safe for all users and crime and fear of crime is reduced.

Sustainable Development – by reducing energy and CO₂ emissions.

11. Background Papers and Consultation

Liaison with other authorities (Sheffield CC, Bradford CC, York CC)

TR27 The use of variable lighting levels (ILE publication)

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