

SUBJECT:	STREET LIGHTING POLICY UPDATE
MEETING:	STRONG COMMUNITIES SELECT
DATE:	24 FEBRUARY 2020
DIVISION/WARDS AFFECTED:	ALL

1. PURPOSE:

Update on street lighting policy for Strong Communities Select.

2. RECOMMENDATIONS:

To continue to support the existing street lighting policy and take note of pressures on service the service

3. KEY ISSUES:

- 3.1 In 2012 MCC used a SALIX loan to upgrade control system to Harvard remote monitoring. The system provided options for switching times, dimming and part-night operation. The policy to switch off streetlights in residential areas was adopted and implemented in 2014 in the main towns. A further roll out in 2017 included smaller towns and villages.
- 3.2 The decision was taken to achieve cost savings but would now include the wider environmental benefits in carbon reduction, light pollution and biodiversity. The primary savings were achieved through reduced energy usage from reduced operating hours. Our policy for residential lights was to turn them off between midnight and around 5:30. The profile for these lights is:- on at dusk, 75 % dim at 20:00, off at 00:00, on at 5:30 75% dim, on at 05:45 full. At the time this was proposed to be achieved using the existing remote control sensors that were run by an external provider Harvard CMS.
- 3.3 Improvements in technology in light bulbs and the long term saving that a switch from traditional halogen bulbs to LED bulbs were also invested in through SALIX loans. These loans are predicated on repayments being achieved through reduced energy usage costs. The first SALIX loan was for 1700 LED bulbs with monitoring system, followed by second SALIX loan for 2500. These are not dimmable systems at present.
- 3.4 Of the 11000 units across the county approximately 8850 are turned off or dimmed as part of the costs saving policy. Unlike many authorities MCC decided that none are completely turned off.
- 3.5 LED bulbs have been widely introduced across the county and have been fitted to columns that incorporated the RC units and those without. Since introducing LED the RC units have become increasingly problematic with difficulties in the market place for providers and in the units themselves.

- 3.6 In phase 3 we are currently upgrading 5800 lanterns (3200 installed to date) so all our lanterns will be led. Phase 3 includes pre-programmed dimming.
Timescale:- February 2019 to October 2020 Our current role out for approx.
Funding:- Salix and Monmouthshire loans payback period 16 years.
- 3.7 Improving technology means the latest LED bulbs can be dimmed across a much wider range and these are being used in all replacements. In the last year all light bulbs that are replaced with the new LED units are given a dimmer unit where lights are pre-programmed to run :-
For new lanterns we now dim residential areas to 20% instead of switching the lights off.
We have 3 profiles:-
Normal (used for junctions and main roads) :- On 100% 20:00-0:00 60%/00:00-06:00 50%/06:00-100%
Dim (residential) :- On 100% 20:00-0:00 60%/00:00-06:00 20%/06:00-100%
Part Night (special cases) :- On 100% 20:00-0:00 60%/00:00-06:00 0%/06:00-100%
- 3.6 The cost of replacing all the RC units with the pre-programmed units is unbudgeted and in the region of £210,000. As the older RC units fail they will be replaced with the new technology.
- 3.7 Many concerns regarding safety and increased crime levels were lodged when the policy was consulted on. We recognise that the perception of crime can be as debilitating for some residents as crime itself but there is no evidence to prove that levels of crime have increased since the policy was introduced.
- 3.8 Where the Police have specific concerns for safety we work closely with them and have reduced the switch-off period. The new LEDs that are 20% dimmed will resolve the issue for those residents that perceive an increase in crime when completely rolled out.
- 3.9 There is a growing body of Dark Sky enthusiasts and environmentalists that would prefer lights to be turned-off completely. Birds and mammals struggle to differentiate day and night and this causes problems for sleeping and feeding patterns.
- 4. REASONS:**
- 4.1 The policy is achieving its outcomes with limited issues and complaints. The wider environmental benefits are now far clearer and more prominent as we understand the climate change emergency implications facing us all.
Energy consumption 2015/16 3,300,000 kwh,
Estimate 2019/20 2,000,000 kwh.
- 4.2 The costs savings from reduced energy usage are being used to repay the SALIX loan over the next 16 years but this leaves very little to meet the increasing energy base unit costs that are increasing by 20% annually.
- 4.3 Whilst we understand the residents desire to see energy cost savings reinvested in increased lighting there is a much greater need for reinvestment in infrastructure.

5. RESOURCE IMPLICATIONS:

- 5.1 There are only two members of the team and responsibilities included managing faults and repairs and managing the street lighting and traffic signals contract. This resource and budget is also continually being absorbed by assisting other Monmouthshire services. These include electric charging points, CCTV, electronic signs and car parks.
- 5.2 The monitoring system provides management of the lighting system and the dimming and switching times can be set remotely, however due to failure some of the equipment has been replaced with photocells both part night and all night as appropriate. This is currently £42 a lantern. The monitoring system will need to be replaced in the next 2 years as the equipment is failing. However, investment in a new system does not provide enough energy savings with LED lanterns. The control gear for the first pre 2019 led lanterns needs to be replaced. Approximately 5000 units will need to be replaced at cost £42 = £210,000 however there will be a saving of £37000 for not maintaining the monitoring system.
- 5.3 The power to most of Monmouthshire County Council lanterns is supplied by our own cable network and this is very old and problematic particularly in Caldicot. When cables fail, these will need to be replaced and this is a high cost issue. The adoption process for housing developments can take up to 10 years. Although fit for purpose when adopted there is limited life left in the assets transferred, in particular, the lanterns are not led and the energy costs are high.
- 5.4 Assets are regularly damaged by vehicles, and many of these are not reported. Lamp columns, signs, safety bollards and traffic lights have to be renewed 16 - 30 items a year. In the last 2 years, we have not been able to recover any of these costs.
- 5.5 Energy costs continually rise every year and needs to be reflected in budget pressures moving forward. The department is also expected to maintain Christmas lights installed by third parties however, our contractor charges for this service.
- 5.6 Only lanterns have been replaced under the led upgrade, the street lighting department has many other assets that need to be maintained. Even though the lights are upgraded to led, maintenance is still required. Traffic Signals:- 12 sets of junction signals and 31 sets of pedestrian signals. Two of these have been renewed and another is in the process of being upgraded. Some of the others are obsolete and cannot be repaired and the majority of the remainder have reached end of life. The effective life of a traffic controller is 12 years so we need to be upgrading three sites a year, however we do not have a budget for this. The implications are that if we have a failure the whole site may not be able to be repaired and the site would have to be switched off for several months.

6. WELLBEING OF FUTURE GENERATIONS IMPLICATIONS (INCORPORATING EQUALITIES, SUSTAINABILITY, SAFEGUARDING AND CORPORATE PARENTING):

There are no policy changes or implication for this update

7. **CONSULTEES:**
DMT Enterprise
8. **BACKGROUND PAPERS:**
n/a
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**SCHEDULE 12A LOCAL GOVERNMENT ACT 1972
EXEMPTION FROM DISCLOSURE OF DOCUMENTS**

MEETING AND DATE OF MEETING:

TITLE OF REPORT:

AUTHOR:

I have considered grounds for exemption of information contained in the report referred to above and make the following recommendation to the Proper Officer:-

EXEMPTIONS APPLYING TO THE REPORT:

FACTORS IN FAVOUR OF DISCLOSURE:

PREJUDICE WHICH WOULD RESULT IF THE INFORMATION WERE DISCLOSED:

MY VIEW ON THE PUBLIC INTEREST TEST IS AS FOLLOWS:

RECOMMENDED DECISION ON EXEMPTION FROM DISCLOSURE:

Date:

Signed:

Post:

I accept/do not accept the recommendation made above

Proper Officer: _____

Date: _____