

EXECUTIVE BOARD

1st April 2019

Subject: Community Council LED Lighting Proposal

Purpose:

To seek agreement to take forward a Community Lighting Project.

Recommendations / key decisions required:

To confirm that the project should proceed.

Reasons:

To ensure future continuity of lighting in local communities, the project would be funded by Town and Community Councils and support environmental aims.

Relevant scrutiny committee to be consulted	No
Exec Board Decision Required	Yes
Council Decision Required	No

EXECUTIVE BOARD MEMBER PORTFOLIO HOLDER:- Cllr. Hazel Evans (Environment) / Cllr. Peter Hughes-Griffiths (Culture, Sport and Tourism)

Directorate: Environment

Name of Head of Service:
Stephen G Pilliner

Report Author:
Richard Waters

Designations:
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EXECUTIVE SUMMARY

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Community Council LED Lighting Proposal

1. BRIEF SUMMARY OF PURPOSE OF REPORT.

There are in the order of 20 000 street lighting units along our highways within Carmarthenshire which are owned and maintained by the Public Lighting Team within the Environment Directorate. There are a further 4900 community lights in Town Council and Community Council areas which are owned by the respective Councils. These community lights are maintained under agreement by the Public Lighting Team and the Town and Community Councils are charged annually for energy consumption and maintenance.

The Public Lighting Team have been working to upgrade our street lighting units from sodium lamp units to LED lighting units. This conversion programme has been introduced to provide efficiencies and is on track to deliver with the final phase (Year 3) of the works scheduled for completion in the current 2018/19 financial year. The LED lighting is more energy efficient and provides improved performance with a 'whiter' light. It is also anticipated to require less future maintenance.

Of the 4900 Community lighting stock there are 4357 lighting units which predominantly still have sodium lamps that are noticeable by their 'yellow' light. Whilst a percentage of the lights are low pressure lamps and some are on part-night lighting or dimming patterns which save energy, they still lack the energy efficiency of the LED units. When outages are reported the lamps are currently replaced on a like for like basis.

There is one supplier of sodium lamps, namely Phillips, who have given notice that they will stop taking orders for low pressure sodium lamps after July 2019. Sodium lamps therefore have a finite life and Community Councils will need to replace all 4357 lamps in the coming years.

Carmarthenshire County Council is in a position to lead a project for this based on our experience of our own street lighting replacement programme. This will contribute towards being a more energy efficient County, it will improve the quality of community lighting and assist Town and Community Councils in an otherwise difficult situation. The project will also supplement Public Lighting staff workloads.

Subject to participation by Town and Community Councils the total cost of the project is forecast to be up to £741k. Funding up to a ceiling of £600k is available from the Salix fund on an invest to save basis. The balance can be funded from reserves with a payback from the Town and Community Councils for the full £741k over an eight year period. During this period savings will be generated from reduced energy consumption. There are additional savings from reduced maintenance although these have not been factored into the payback period in accordance with Salix funding rules.

Each community light is unique in terms of the internal gearing mechanism and lamp unit and lights are also subject to differing part-night lighting or dimming patterns. The Public Lighting

Team hold information on each lighting unit and cost the energy and maintenance of each of the 4900 lamps owned by the respective Town and Community Council. Some Community Councils own as few as 1 lamp, such as Llansawel, whereas others, like Carmarthen Town Council can own as many as 500 lamps.

Proposed Way Forward

Community Councils regard public lighting as a high value facility where it is provided and previous approaches to reduce provision have been rejected by the Town and Community Councils. Should the Community Councils wish to retain the current level of public lighting there is considerable benefit for the Councils to work collaboratively with the County Council to have a single renewal programme. The County Council is able to secure economies of scale, provide a coordinated programme and secure access to external funding via the Salix fund.

It is therefore proposed that the County Council act as budget holder to roll forward the programme with an agreement from the Town and Community Councils that they would pay back the costs over an 8 year timeframe raised from their own precepts. Payback would commence in April 2020 which accords with Salix requirements.

Finance

Previous experience indicates that the cost through a County Council managed project of replacing the lanterns with dimming LED units will be up to £170 per unit. This compares very favourably to the option of Community Councils having the lanterns changed outside the project which is estimated to cost approximately £250 per unit but could be higher depending on location and traffic management requirements. If all 4357 lighting units are to be changed then the total project cost would be in the order of £741k.

Based on a payback of £21.26 per unit per year the repayment is calculated in the table below:

Opening balance	Payback period	Amount repaid	Closing balance
£741 000	1 st Year. 04/2020 to 04/2021	4357 x £21.26 = £92 630	£648 371
£648 371	2 nd Year 04/2021 to 04/2022	4357 x £21.26 = £92 629	£555 742
£555 741	3 rd year 04/2022 to 04/2023	4357 x £21.26 = £92 629	£463 113
£463 113	4 th year 04/2023 to 04/2024	4357 x £21.26 = £92 629	£370 484
£370 484	5 th year 04/2024 to 04/2025	4357 x £21.26 = £92 629	£277 855
£277 855	6 th year 04/2025 to 04/2026	4357 x £21.26 = £92 629	£185 226
£185 226	7 th year 04/2026 to 04/2027	4357 x £21.26 = £92 629	£ 92 597
£92 597	8 th year 04/2027 to 04/2028	4357 x £21.26 = £92 629	£ -32

No interest is charged on either the Salix funding or County Council funding.

The County Council currently charges Town and Community Councils an average of £38 per lamp as a fixed annual cost to cover maintenance and management of their lighting stocks. This includes electrical testing, Night Time Patrols, fault finding, energy procurement, ensuring that the inventory is up to date for accurate energy usage, holding stocks, general administration and management etc.

In converting community lights to dimming LED units Town and Community Councils are calculated to save an annual average of £14.73 /unit based on a future energy cost of

16.56294p/KWH but this figure will vary depending on the specific lamp details and the night lighting regime and could range from £5.21 to £18.80. Communities with part-night lighting will save less energy.

Engagement

It is proposed to write to each of the Town and Community Councils to outline the aims of the project and to invite participation. At this stage the likely take-up of the offer is unknown but the costings outlined above cover full take-up. Some Town and Community Councils may wish to review whether all of the community lights they have are still necessary but previous exercises along these lines have not resulted in any particular reduction in lighting stocks.

Legal

Agreements with the respective Town and Community Councils will be put in place prior to the works being undertaken and repayments schedules will be included within the agreement.

Consequences for Non-Participating Councils

In the event that some Councils do not wish to participate in the project our Public Lighting Team will continue with the current energy charging and maintenance regime but after July 2019 we will be unable to replace failed lamps. These lighting units do not have a highway function.

Timescales

With the agreement of the respective Councils it is anticipated that the LED conversion works would be completed within the 2019 / 2020 financial year. Repayments will then commence from April 2020 for a period of 8 years.

Conclusion

Sodium lighting units are an outdated technology which has been superseded by more energy efficient LED units and replacement sodium lamps will not be available in the future. The proposed project involves a scheduled replacement programme offering considerable economies of scale and should reduce lantern replacement costs down from £250, if lanterns are replaced on an ad hoc basis when they fail, to around £170 achievable through a scheduled replacement.

The improved energy efficiency of LED units will help fund this and £600k of the projected £741k cost is available through the energy 'invest to save' Salix fund. The County Council will fund the remaining £141K through reserves with Town and Community Councils paying back the capital over an eight year period.

Recommendation

The approval is given for the project to be taken forward

DETAILED REPORT ATTACHED?	NO
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IMPLICATIONS

I confirm that other than those implications which have been agreed with the appropriate Directors / Heads of Service and are referred to in detail below, there are no other implications associated with this report :

Signed: S G Pilliner

Head of Highways and Transport

Policy, Crime & Disorder and Equalities	Legal	Finance	ICT	Risk Management Issues	Staffing Implications	Physical Assets
YES	YES	YES	NONE	YES	NONE	YES

1. Policy, Crime and Disorder and Equalities

Town and Community Councils who do not wish to participate in the project will have to consider in due course the impact of failed community lighting units. This will be raised with the respective Councils during the engagement process.

2. Legal

Agreements will need to be put in place with all participating Town and Community Councils.

3. Finance

A provisional booking of £600k has been made with the SALIX fund and £141k will be required from County Council reserves, assuming all Town and Community Councils wish to participate. These costs are based on estimated replacement costs and full participation but the project can be scaled accordingly.

5. Risk Management Issues

The main risk associated with the project is the non-participation by Town and Community Councils. This does not in itself present a risk to the project which can be scaled down accordingly.

7. Physical Assets

The physical assets involved are owned by Town and Community Councils and not the County Council.

CONSULTATIONS

I confirm that the appropriate consultations have taken in place and the outcomes are as detailed below

Signed: S G Pilliner

Head of Highways and Transport

1. Scrutiny Committee

N/A

2. Local Member(s)

N/A

3. Community / Town Council

To be undertaken at the initial stage of the project.

4. Relevant Partners

Welsh Government for Salix funding.

5. Staff Side Representatives and other Organisations

N/A

Section 100D Local Government Act, 1972 – Access to Information

List of Background Papers used in the preparation of this report:

THERE ARE NONE

Title of Document	File Ref No.	Locations that the papers are available for public inspection
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