

Notice of:	EXECUTIVE
Decision Number:	EX36/2021
Relevant Officer:	John Blackledge, Director of Community and Environmental Services
Relevant Cabinet Member:	Councillor Jane Hugo, Cabinet Member for Climate Change and Councillor Neal Brookes, Cabinet Member for Enforcement, Public Safety, Highways and Transport
Date of Meeting	12 July 2021

BLACKPOOL STREET LIGHTING AND TRAFFIC SIGNALS PRIVATE FINANCE INITIATIVE (PFI) – REPLACEMENT LED LUMINAIRES

1.0 Purpose of the report:

- 1.1 To provide a background information to enable the Executive to approve the recommendation to commence contract procedures and implement a change with the Community Lighting Partnership (CLP) to change the current High Pressure Sodium (SON) and Cosmopolis (CPO) street lighting sources to Lighting Emitting Diode (LED) luminaires.

This report outlines the advantages to the Council of changing the current luminaires, the associated energy cost savings and climate change impact in terms of the carbon reduction achieved by implementing this proposed change.

The project will realise a 1,029 tonnes of CO2 reduction per year, based on current emissions rates, which represents an 8% reduction on the total utility related carbon emissions of the Council. This level of reduction is vital to the Council's 2030 pathway to net zero works, as the project delivers essentially a unique opportunity to deliver a large scale of energy and CO2 reduction in a singular instance, which would be impossible to replicate in any other Council setting or asset.

2.0 Recommendation(s):

- 2.1 That subject to the approval of the Head of Legal to engage Browne Jacobson (legal advisors) to assist the Council and commence contract procedures with the Community Lighting Partnership (CLP) to enable a change to the Blackpool Street lighting and Traffic Signals PFI Contract, namely the replacement of all High Pressure Sodium and Cosmopolis lanterns with Lighting Emitting Diode lanterns

2.2 To fund this scheme by Prudential Borrowing of £4.8m, the borrowing to be repaid from energy savings resulting from the installation of LED's.

2.3 To commence implementation of the change following the successful completion of the contract formalities to enable a saving of £688,000 per year to be achieved and reduce carbon emissions by in excess of 1000 tonnes per year.

3.0 Reasons for recommendation(s):

3.1 To enable Blackpool Council to engage with lawyers experienced with the Blackpool PFI contract to execute the changes to the contract

To replace the current High Pressure Sodium (SON) and Cosmopolis (CPO) street lighting sources to Lighting Emitting Diode (LED) luminaires to ensure Blackpool Council have the best possible street lighting provision that will reduce the energy cost and reduce the carbon emissions.

3.2 Is the recommendation contrary to a plan or strategy adopted or approved by the Council? No

3.3 Is the recommendation in accordance with the Council's approved budget? Yes

4.0 Other alternative options to be considered:

4.1 None.

5.0 Council priority:

5.1 The relevant Council priority is: "The economy: Maximising growth and opportunity across Blackpool".

6.0 Background information

6.1 Current Contract Information

In 2009, Blackpool Council entered into a 25-year Private Finance Initiative (PFI) contract with Community Lighting Partnership (CLP). The contract commenced on 1 January 2010 and the maintenance liability and responsibility for 18,000 street lighting units, 2,000 illuminated traffic signs and bollards and 81 Traffic Signal junctions and 47 pedestrian crossings transferred to CLP.

During the first five years of the contract 15,600 street lights were replaced and 101 traffic

signal junctions and pedestrian crossings, this period was known as the Core Investment Period (CIP).

The Contract required Community Lighting Partnership to provide materials that complied with the contract requirement for light performance and that the installation was delivered in accordance with the Output Specification of the contract. The luminaires chosen at contract commencement were High Pressure Sodium and Cosmopolis. During the procurement of the Contract, (pre 2009 when Blackpool Council entered into Contract with Community Lighting Partnership) LED technology for street lighting was not as developed as it is now and therefore LED were not put forward by Community Lighting Partnership for the PFI.

A Central Management System (CMS) was also included in the PFI Contract. The CMS provided the ability to remotely adjust the light output as well as monitoring the performance of the units to identify faults.

Circa 2,400 street lights included in the contract were classed as deemed to comply (DTC) during the CIP and therefore the contract provided for the replacement of these from 2020 to 2026 as part of the Annual Investment Program (AIP).

In 2019, Community Lighting Partnership reported that the SON and CPO luminaires that were included in the Contract and installed in the Core Investment Period were no longer available from suppliers. These luminaires were no longer manufactured, and therefore obsolete. Community Lighting Partnership requests for a change to LED for maintenance purposes was agreed. Consequently, the luminaires that will be replaced in the AIP (2400 street lights) will also be LED luminaires.

6.2 Energy Costs in a single year and Carbon Output

The cost of electricity for each kilowatt hour (kWh) has increased from 7.8p in 2009/10 to 15.013p in 2020/21, an increase of 92%.

The current consumption of lighting units within this proposal is 7,995,868 kWh per year, at an annual cost of £ 1.18m.

The current expectation is the cost of electricity will continue to rise for the foreseeable future.

On the 26th June 2019, the Council approved a Climate Change emergency declaration noting:

- That the impacts of climate breakdown are already causing serious damage around the world.
- That the 'Special Report on Global Warming of 1.5°C', published by the

Intergovernmental Panel on Climate Change in October 2018, (a) describes the enormous harm that a 2°C average rise in global temperatures is likely to cause compared with a 1.5°C rise, and (b) confirms that limiting Global Warming to 1.5°C may still be possible with ambitious action from national and subnational authorities, civil society and the private sector.

Setting the following carbon dioxide emission and renewable energy targets to:

- Make the Council's activities net-zero carbon by 2030;
- Achieve 100% clean energy across the Council's full range of functions by 2030.

Based on 2019 data, the Council is responsible for approximately 12,500 tonnes of Carbon Dioxide due to the associated electricity, gas and water use. Electricity use is the largest cause of emissions accounting for 57%, with gas second at 42%. The Council's water consumption only accounts for 1% of emissions.

If the UK and Blackpool Council are to achieve their carbon emission targets undertaking large scale efficiency projects to reduce the electricity consumption are critical.

The project will realise a 1,029 tonnes of CO₂ reduction per annum, based on current emissions rates, which represents an 8% reduction on the total utility related carbon emissions of the Council. This level of reduction is vital to the Council's 2030 pathway to net zero works, as the project delivers essentially a unique opportunity to deliver a large scale of energy and CO₂ reduction in a singular instance, which would be impossible to replicate in any other Council setting or asset.

To give some context to the scale of the energy savings in one year it would be equivalent to turning the Illuminations off for 34 years.

6.3 Proposed Change – Principle Driver

The principle driver in recommending approval to implement the change to LED lamps is the demonstration of costs savings to the Council in Energy and significant reduction in carbon emissions, with its consequential impact on the climate change agenda.

6.4 Proposed Energy Savings

The information below demonstrates the energy savings per year that would be realised by changing to LED, the proposed financial model that demonstrates affordability of the proposal to change is included in the Financial section of this report.

Replacement of all units with light levels designed to meet the current British Standard and retaining the existing CMS system.

Total number of units –	15,440
Current annual energy consumption -	7,995,868 kWh
Current annual energy cost -	£1.18m
LED annual energy consumption -	3,332,039 kWh
LED energy cost-	£499k
Consumption saving -	4,587,206 kWh
Cost Saving	£688k
% Saving	57.9%

Carbon Reduction - This is representative of a saving in CO2 tonnes of 1,029 per year (based on current BEIS emission factors).

6.5 Communication Management System (CMS) Upgrade

The PFI contract provides for upgrading of the Central Management System (CMS) system which is due to commence in 2023 and be delivered under the current PFI contract over the course of 6 years. Use of this programme of work could offset the work required as part of this LED retrofit. Blackpool Council have entered into discussions with Community Lighting Partnership to bring forward the replacement CMS, the value of the CMS replacement system is estimated to be a saving of £1.54m, but will be subject to further due diligence.

6.6 Considerations during proposed change – Communications

It is important to ensure that this proposed change is effectively communicated to members of the public.

Blackpool Council and Community Lighting Partnership will work in partnership to ensure that residents are consulted on the change to LED luminaires including explaining details of visual changes that may be experienced.

6.7 Performance

The reliability of the LED luminaires is key to the success of this project. Negotiations during the development of the change to the Contract in particular the output specification should ensure a suitable warranty period, 15 or 20 years, is provided by the luminaire manufacturer. This warranty will transfer to the Council on the completion of the PFI contract in 2035.

6.8 Delivery of Change

The expectation is that this change will be delivered by Community Lighting Partnership and their sub-contractor Eon. This is beneficial to both parties in the continuity of maintaining the existing lighting system and gives clarity on any subsequent apparatus warranty issues should they arise.

Subject to the legal and contract formalities the start date for implementation will be 2022 /23 financial year. The period for delivery of the replacement with LED luminaires is expected to take two years following agreement of the change and completion of contract formalities.

6.9 Does the information submitted include any exempt information? No

7.0 List of Appendices:

7.1 None.

8.0 Financial considerations:

8.1 Based on the current estimated scheme costs of £6.3m less the Central Management System CMS saving of £1.54m (see 5.5.1) leaves £4.8m to be funded by prudential borrowing. The Council has taken a prudent approach to savings basing them solely on current prices. The annual savings that will accrue from the installation of LED's is estimated to be £688,000. As the table below shows over a ten year period the Council will not only pay off the prudential borrowing, but in addition make savings of £925,000 from this investment. In reality given the ongoing upward pressure being experienced in the energy market it is hoped the savings may well significantly exceed this projection. It is also important to note that the lights have an expected operational life of 20 years, which means that after paying off the Prudential Borrowing of 10 years, the following 10 years could see savings in excess of £6m.

	Total £k	Yr1 £k	Yr2 £k	Yr3 £k	Yr4 £k	Yr5 £k	Yr6-10 £k
Borrowing Cost	5,955	688	668	647	626	605	2721
Energy Saving	6,880	688	688	688	688	688	3440
Overall Saving	925	0	20	41	62	83	719

9.0 Legal considerations:

9.1 Browne Jacobson has provided advice to Blackpool Council in respect of the PFI contract since 2012, in particular they provided advice in respect of the re-financing in 2015. Due to the knowledge of the Contract and experience in PFI contracts, authority is sought to retain Browne Jacobson to provide the contract formalities on behalf of Blackpool Council including assisting in the agreement of the change notice in the PFI contract with Community Lighting Partnership, for LED luminaires to be installed over a 2 year period in Blackpool.

10.0 Risk management considerations:

10.1 The information contained within this report has been compiled using the existing inventory and standard industry operating procedures along with the application of current LED apparatus and performance criteria. The following risks and mitigation of the risks have been considered:

- Budget and Payback Period;
- Performance – reliability of the LED lamps including warranty periods;
- Maintenance;
- Delivery.

11.0 Equalities considerations:

11.1 Consultation with all Communities in groups prior to the implementation of this change.

12.0 Sustainability, climate change and environmental considerations:

12.1 The project will realise a 1,029 tonnes of CO2 reduction per year, based on current emissions rates, which represents an 8% reduction on the total utility related carbon emissions of the Council. This level of reduction is vital to the Council's 2030 pathway to net zero works, as the project delivers essentially a unique opportunity to deliver a large scale of energy and

CO2 reduction in a singular instance, which would be impossible to replicate in any other Council setting or asset.

13.0 Internal/external consultation undertaken:

13.1 Consultation will be undertaken with residents.

14.0 Background papers:

14.1 None.

15.0 Key decision information:

15.1 Is this a key decision? Yes

15.2 If so, Forward Plan reference number: 13/2021

15.3 If a key decision, is the decision required in less than five days? No

15.4 If **yes**, please describe the reason for urgency:

16.0 Call-in information:

16.1 Are there any grounds for urgency, which would cause this decision to be exempt from the call-in process? No

16.2 If **yes**, please give reason:

TO BE COMPLETED BY THE HEAD OF DEMOCRATIC GOVERNANCE

17.0 Scrutiny Committee Chairman (where appropriate):

Date informed: 2 July 2021 Date approved:

18.0 Declarations of interest (if applicable):

18.1 None.

19.0 Executive decision:

19.1 The Executive agreed the recommendations as outlined above namely:

1. That subject to the approval of the Head of Legal to engage Browne Jacobson (legal advisors) to assist the Council and commence contract procedures with the Community Lighting Partnership (CLP) to enable a change to the Blackpool Street lighting and Traffic Signals PFI Contract, namely the replacement of all High Pressure Sodium and Cosmopolis lanterns with Lighting Emitting Diode lanterns
2. To fund this scheme by Prudential Borrowing of £4.8m, the borrowing to be repaid from energy savings resulting from the installation of LED's.
3. To commence implementation of the change following the successful completion of the contract formalities to enable a saving of £688,000 per year to be achieved and reduce carbon emissions by in excess of 1000 tonnes per year.

20.0 Date of Decision:

20.1 12 July 2021

21.0 Reason(s) for decision:

21.1 To enable Blackpool Council to engage with lawyers experienced with the Blackpool PFI contract to execute the changes to the contract

To replace the current High Pressure Sodium (SON) and Cosmopolis (CPO) street lighting sources to Lighting Emitting Diode (LED) luminaires to ensure Blackpool Council have the best possible street lighting provision that will reduce the energy cost and reduce the carbon emissions.

22.0 Date Decision published:

22.1 13 July 2021

23.0 Executive Members in attendance:

23.1 Councillor L Williams

Councillor Benson, Hobson and Smith

24.0 Call-in:

24.1

25.0 Notes:

25.1 The following Executive members while not present in the room and not able to vote, joined and participated in the meeting virtually:

Councillors Brookes, Campbell, Farrell, Hobson, Hugo and I Taylor.