



**Glasgow City Council**  
**City Administration Committee**

**Item 4**

10<sup>th</sup> February 2022

**Report by Councillor Anna Richardson, City Convener for  
Sustainability and Carbon Reduction**

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**INTELLIGENT STREET LIGHTING PHASE 2  
CAPITAL PROGRAMME 2020 TO 2023 – FUNDING FOR GLASGOW**

**Purpose of Report:**

To seek Committee approval for the acceptance of European Regional Development Fund to deliver the Intelligent Street Lighting Programme Phase 2.

**Recommendations:**

It is recommended that Committee approves the acceptance of £585,278 European Regional Development Fund .

Ward No(s):

Citywide: ✓

Local member(s) advised: Yes  No  consulted: Yes  No

## **1. Background**

- 1.1 Following the implementation in Glasgow City centre of the Intelligent Street Lighting Phase 1 (ISL), it was recognised that ISL should and could be implemented City wide.

A bid was made for a second phase to secure funding via the 8<sup>th</sup> City program to extend to other areas of the City.

This project was selected and approved for inclusion within a wider ERDF Operation, by both the 8<sup>th</sup> City Advisory Group and 8<sup>th</sup> City Strategic Board. These partnership structures (which includes representation from all Scottish cities and Scottish Government) were established as part of the governance arrangements that have been put in place for the 8<sup>th</sup> City Programme.

The objectives of the ISL Phase 2 Project are:

- Increase the efficiency of the Street Lighting Network by installing 3000 LED Luminaires in Glasgow on existing or replaced lighting columns installed by the Column Replacement Project.
- Expand the Central Management System (CMS) to remotely manage these 3000 lights. The Installation of Central Management System which monitors the performance of the lights and reports faulty units will improve service delivery, further increase energy savings, and reduce maintenance costs.
- Expand the Low Bandwidth Wireless Canopy to enable the communication between these lights, the lights installed in Phase 1 and the CMS.
- Install sensors to deliver data (air quality, footfall etc), to enhance Glasgow's Smart City footprint.

## **2. Funding**

- 2.1 The Project is estimated to cost £1,439,196 to deliver, with 40% of the costs (£585,278) being funded by the European Regional Development Fund managed through the Scottish Government's 8<sup>th</sup> City Programme and the remaining 60% will be met existing capital allocation.

## **3. Project**

- 3.1 The ISL Phase 2 project will increase the footprint of the managed system out with the City Centre by shadowing and adding value to the ongoing Lighting Column replacement programme. These complementary projects will ensure the reliability and safety of the City's lighting network into the 21<sup>st</sup> century and enhance Glasgow's Smart infrastructure .

Smart Infrastructure will be achieved by:

- Installing energy efficient LED Lights
- Installing access points and nodes to bring the lights under CMS control.

- Installing sensors to collate Data (air quality, footfall etc) to enhance the Glasgow's Smart City infrastructure.

3.2 LED luminaire deployment will reduce electricity consumption by 50% (compared to the existing Sodium Lights) for 3000 Lights. The LED luminaires have a life expectancy of 18 years, reducing the cost of maintaining these lights.

The CMS will make further light level adjustments as needed and will further reduce electricity consumption up to an estimated 68% less than current usage. The system also allows operatives to monitor the performance of the lights ensuring that they are operating at maximum efficiency. It provides daily alerts informing the lighting operatives of faulty units along with a diagnostic report. This will reduce time spent on identifying faults as well as on site fault analysis, improving Service delivery.

The Intelligent Street Lighting Network will give the Council the ability to gather data through a range of sensors. This will provide the Council with a snapshot of how the City is functioning and allow Senior Management to develop strategies to target issues based on real data.

#### 4. Policy and Resource Implications

##### Resource Implications:

*Financial:* This will provide additional match funding of £585,278 for Lighting improvement works from Jan 2020 to June 2023.

*Legal:* GCC Legal Services has conducted due diligence prior to signing of approval letters.

*Personnel:* No direct personnel issues

*Procurement:* Works will be procured via the Contracts for the Lighting Column Replacement projects and the Intelligent Street Lighting Project Phase 1

**Council Strategic Plan:** The project supported by this funding in turn supports the following Strategic Plan themes:

Resilient and Empowered Neighbourhoods  
Outcome:  
Priority 73:

A Sustainable and Low Carbon City:  
Priority 63:

The following Strategic Plan outcomes are supported:

- A resilient, growing, and diverse city economy where businesses thrive.
- Glasgow is a world class destination for tourism, culture, sport, events, and heritage.
- Glaswegians are active and healthier.
- Glasgow is healthier.
- Citizens and communities are more self-reliant for their health and wellbeing.
- Citizens use active travel, including walking and cycling.
- We have more sustainable, intelligent lighting network across the city, supporting Glasgow's Smart City ambitions
- We have a low carbon footprint as a council and as a city.
- Citizens can access good facilities locally.

More specifically, the funding makes an important contribution towards the Council's commitment to provide an energy efficient, sustainable Lighting service across the city.

Good efficient street lighting provides a safe environment encouraging our citizens to participate in active travel during night-time hours.

**Equality and Socio-Economic Impacts:**

*Does the proposal support the Council's Equality Outcomes 2021-25? Please specify.*

Generally supportive of most stated outcomes.

*What are the potential equality impacts as a result of this report?*

Positive Impact

*Please highlight if the policy/proposal will help address socio-economic disadvantage.*

By improving the Lighting Service this will provide opportunities for access to sustainable and/or active travel and enhancing local environments through the hours of darkness. A safer environment through improved lighting can help address barriers to social mobility, improve access to services and can help to address problems of physical and mental health and wellbeing

### **Climate Impacts:**

*Does the proposal support any Climate Plan actions? Please specify:*

This proposal supports the Council's Climate Action Plans by introducing sustainable energy efficient street lighting, lowering our carbon footprint

*What are the potential climate impacts as a result of this proposal?*

This Network will reduce energy consumption and reduce carbon emissions.

*Will the proposal contribute to Glasgow's net zero carbon target?*

This proposal will contribute to Glasgow's net zero carbon target.

### **Privacy and Data Protection Impacts:**

No data protection impacts identified

## **5. Recommendations**

It is recommended that Committee approves the acceptance of the £585,278 European Development Fund.