

**To Each Member Waterford City & County Council**

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**Proposed Section 85 Agreement Regarding the Public Lighting Energy Saving LED Retrofit Project – South West Region**

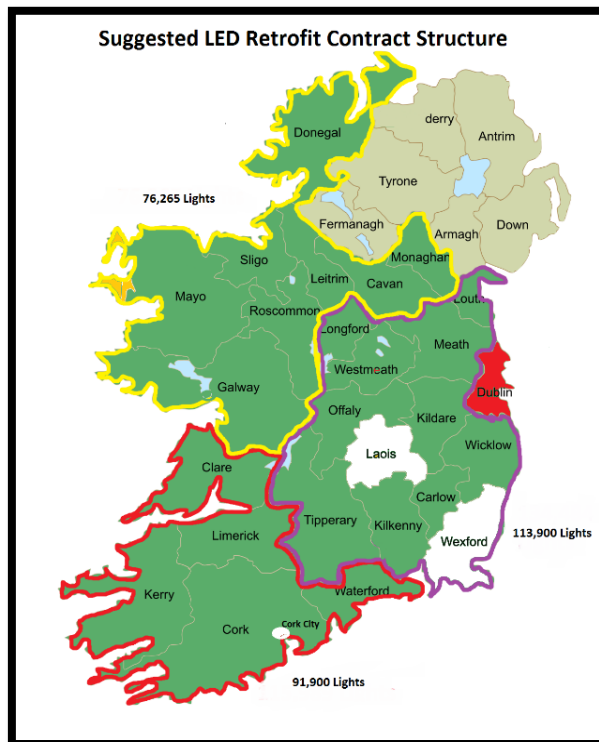
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**Section 1 Overview of the Programme**

The Roads Management Office (RMO) Public Lighting (PL) Unit, a local authority shared service, based in Cork County Council delivered, in 2018, a business case which considered the financial and economic viability of undertaking a major retrofit of Local Authority public lighting in Ireland with high efficiency LED lanterns. By taking full advantage of technological developments, the retrofit project has the capacity to deliver significant energy efficiencies and cost savings to Local Authorities. The business case underwent a Peer review process by the Local Government Agency Office (LGMA) and was approved towards the end of 2018. The role of the RMO Public Lighting Unit now is to drive the implementation the project across 24 participating local authorities.

The business case recommended as follows:

- A Regional Design & Build Project with Lead Authority as contracting authority;
- Achieve as far as possible 100% retrofit to energy efficient LED Lantern’s
- 3.7% replacement of non ESNB defective columns
- Undertake asset condition survey & testing as part of installation works
- Financed through HFA loans to each LA



**Fig1: Proposed Regional Set Up for LED Public Lighting Retrofit Contracts**

The business case identified Cork as lead authority in the South West Region, being the largest owner of public lights in that region. It is proposed therefore that Cork County Council will lead the project for Cork County, Kerry, Waterford City & County, Clare and Limerick City & County. A Section 85 Agreement of the Local Government Act 2001 will be used to formalise this arrangement;

The main key drivers which influenced the recommended option in the business case include:

- Energy Savings Targets;
- Carbon Reduction Targets;
- Reduced Electricity Costs;
- Reduced Maintenance Costs;
- Maximise Economies of Scale; Both supply and installation;
- Consistency of Approach and Standards;
- Replace Redundant Technologies;
- Go towards addressing existing Electrical Regulation Deficiencies (Unbundling)
- Improved Safety of Public Lighting Asset

## Section 2: Project Benefits in National Context

Along with cost savings for Local Authorities the Project is deemed to be of strategic importance to Local Authorities to help them reach their energy efficiency targets. Ireland's first National Energy Efficiency Action Plan (NEEAP) published in 2009 put an obligation on the public sector to take a leadership role on climate action by improving its energy efficiency by 33% by 2020. As of the end 2016 the 31 Local Authorities had, as a group, achieved 20% efficiency and this was largely achieved as the result of efficiency in areas other than public lighting. Successful implementation of the Project will largely determine whether Local Authorities meet their energy efficiency objectives. To highlight this, the recently published Public Sector Energy Efficiency Strategy (PSEES) refers to the public lighting project as a key contributor to the achievement of national energy saving goals.

Base Case (€m)	Incremental
<b>Present value @ 4% discount rate (€m) &amp; SPPF 130%</b>	
<b>Incremental capital costs</b>	<b>(107.5)</b>
Avoided energy costs	127.9
Avoided maintenance costs	39.8
Avoided carbon costs	19.5
Incremental terminal value	(1.8)
<b>Total benefits</b>	<b>185.4</b>
<b>CBA Outputs 60% Efficiency</b>	
<b>NPV (€m)</b>	<b>77.9</b>
Benefit cost ratio	1.7
IRR	11.8%
Discounted payback (years)	10.6

Fig 2: Cost Benefit Analysis (CBA) Summary for National Project (24 Participating Local Authorities)

## **Supports**

Nationally the project has also been successful in November 2018 in achieving **€17.47 million** in assistance from the Climate Action Fund set up by the Department of Communications, Climate Action and Environment (DCCA). The climate action fund represents approximately 10% of the project capital costs. This grant payment has not been included in the financial appraisal as the Project is moving to the validation stage and scheduling of payments has yet to be confirmed. This support from the Climate Action Fund will make the Project even more financially viable for Local Authorities.

## **Project Implementation**

The implementation of the Project examined as to what would be the best solution and most efficient contract structure and procurement methodology. A number of possible solutions were considered from an Energy Performance Contract to a modified maintenance contract. After consideration it is recommended that a regionalised Design & Build LED retrofit contract would be the most appropriate solution. This approach maximises economies of scale while ensuring sufficient scale to support competition.

A tender competition was held during 2018 for technical consultants with Arup Consulting appointed early 2019 by the RMO. The technical consultants will assist with drafting tender documents together with project specifications. A national public lighting technical working group was also established to review the development of such contract documents, standards and specifications to ensure the project delivery is fit for purpose and of a high quality.

## **Business Case & Cost Benefit Analysis Independent Review:**

The business case was reviewed by the NTMA New Era who assisted with the Cost Benefit Analysis. In addition Department of Public Enterprise and Reform (DPER) undertook a review and were satisfied with the business case together with CBA where they requested the CBA be stress tested and be revised with the following assumptions:

- Includes for Shadow Costs on Capital (130%)
- Updated Carbon Emissions
- Updated Discount Rate (4%)

## **Section 3: Project**

### **Programme**

Key programme milestones are as follows:

- The business case for the project received LGMA approval in late 2018;
- In Q1 2019, ARUP consulting engineers were appointed by the RMO to prepare tender documentation and other associated / supporting documents;
- Tender works contract for Region 1 (South West) in Q1 2020;
- Appoint a work contractor for Region 1 (South West) in Q3 2020;
- Works Contract 2 year retrofit programme + 2 years defects period.

### **Quality**

The contract specifications are currently being developed by the technical consultant including design standards and specifications. A national Public Lighting Technical Working Group (PLTWG) has been established through the LGMA to ensure such standards and specifications are fit for purpose and will deliver the highest of standards for the project.

Warranties, guarantees and bonds are to be structured and built into the contract to ensure that a high quality product is used for the retrofit of the public lights and ultimately a high standard of public lighting service is delivered.

#### **Section 4**

##### **Recommendation**

It is recommended that Waterford City and County Council enter into a S. 85 agreement with Cork County Council in order to progress this project through to the next phases including the tender process, contract award and contract implementation and that the following resolution be adopted.

***Pursuant to Section 85 of the Local Government Act 2001 as amended Waterford City & County Council hereby agrees to enter into an Agreement with Cork County Council whereby Cork County Council will carry out all of the functions of Waterford City & County Council in respect of the Public Lighting Energy Saving LED Retrofit Project – South West Region with the exception of obtaining any necessary planning approvals and undertaking public consultation procedures as required under the Planning and Development Acts and Regulations.***

***It is hereby resolved under Section 85 of the Local Government Act 2001 as amended to enter into this Agreement with Cork County Council for the provision of the services as outlined above.***

**Fergus Galvin  
Director of Services  
Roads, Water & Environment**