Report to Environment Scrutiny Committee LED Lighting Project Update.

1. Introduction and Background

- **1.1** The Authority Public Lighting section has continued to implement a programme to convert sodium lanterns to LED lanterns as approved by Executive board on 27th July 2015. The programme was developed to deliver a targeted efficiency saving of £627,000 over a three year period.
- **1.2** The report to Executive Board set out that £401,000 of revenue savings would be achieved through converting the Sodium lamps to LED with a further £227,000 to be delivered from reduced maintenance, labour and plant costs.
- **1.3** Executive Board resolved:
 - 1.3.1 That the Technical Services Department be authorised to prepare a business case to pursue the option of funding the capital investment required to deliver the "Converting sodium lanterns to LED lanterns" option savings over the next years to implement Phases 1-3 noted in the report, via the WAG "Invest to Save" fund.
 - 1.3.2 That the Technical Services Department's reserves (Fleet Management Reserve) be utilized to fund the capital works (up to £1.875m) required to deliver the PBB savings identified in Phase 1 and Phase 2 of the report, and that the Department continues to investigate alternative funding for Phase 3;
 - 1.3.3 That the Public Lighting section fully implements measures to deliver the options for reducing maintenance, vehicle and labour costs noted in the report thus reducing its operational costs in order to meet its PBB targets;
 - 1.3.4 That, should the proposals noted above fail to be delivered, then a programme of "de-commissioning" lights on the road networks be prepared by the Public Lighting section to achieve the required budget savings for the outstanding amount and report thereon be submitted in due course.
- 1.4 The capital investment required to fund delivery of the first phases of the programme was secured from a Wales Government Invest to Save Fund and reserves.

The programme was structured into three phases as set out in the Table One overleaf:

Table One

Phase	Programme Detail	Capital Investment 000's	Forecast Revenue Savings
		£	£
1	Convert 3,202 Lanterns to Dimmable LED	925	119
2	Convert 4,429 Lanterns to Dimmable LED	950	153
3	Convert 4,776 Lanterns to Dimmable LED	1090	137
Total		2,965	409

2.0 Progress

Funding for the programme was secured through a £1.4 million Invest to Save Loan and the balance from the reserves, as approved by Executive Board. Further provision has been made from the Public Lighting section.

The original programme was reviewed and amended to exploit advancement in technology and improve efficiency during the installation phase. The detail is set out in Table Two below:

Table Two

Phase	Original Detail	Progress	Capital Investment Incurred/Forecast 000's	Variati on	Revenue Savings Realised/ Forecast
1	Convert 3,400 Lanterns to Dimmable LED	Converted 3,400 lamps	586	- 339	145
2	Convert 2,945 Lanterns to Dimmable /high Wattage LED	Converted 2,945 lamps	530	- 420	162
3	Convert 6,074 Lanterns to Dimmable LED	Ready for Implementa tion in 18/19	985 (Forecast)	-105	137
Total			2101	-864	444

The total PBB saving delivered to the end of Phase Three is £734,000.

The saving delivered to the end of the current financial year is consistent with the budget profile as set out in Table Three below.

Table Three

	2015/16	2016/17	2017/18	2018/19
	£000's	£000's	£000's	£000's
PBB Savings Target	258	196	173	107
Cumulative	258	454	627	734

In terms of capital investment, the authority has drawn down the full £1,400,000 of an agreed invest to save loan.

The forecast savings moving forward are reliant on the Department continuing to sustain the efficiencies, the programme is subject to risk particularly with regards to energy costs.

The efficiencies gained from the procurement process has enabled all three phases of the LED conversion program to be delivered below the original forecasted budgeted costs. This has enabled us to fund all of the LED lantern conversions as set out in Phase 3.

The project to date has been successful in delivering the efficiencies forecast at the outset and we envisage that phase 3 will continue in the same vein.

Conclusion and Recommendation.

Members are asked to consider and comment on the progress to date as set out in the report.