

Overview and Scrutiny Committee

Monday 29 June 2015

Energy Efficiency Update Report

Author: Maria Blundy, Head of Built Environment

9 July 2015

Introduction

In October 2013 Strategic Energy Consulting were engaged to carry out an Energy Survey which would identify and prioritise the areas where savings in energy could be made. The following action plans are extracts from the two reports issued in November 2013 with the latest update on progress.

ACTION PLAN – Civic Centre

Recommendation	Estimated Annual Savings			Estimated Cost	Payback Period	Update
	£	CO2 tonnes	kWh			
Implement an Energy Management System	7,000	37	130,000	10,000	1.4	This concerned the implementation of a management system and tools and techniques e.g. control systems and it remains an outstanding action.
Lighting Savings	7,516	40	73,744	19,360	2.58	T5 conversion kits were recommended to reduce the load by 40%. In addition, occupancy and day light sensing controls were recommended. However, in 2010 a number of energy efficiency measures were carried out. One of them was installation of pull down cords to lights so they can be switched off when not required (the best efficiency measure).
Boiler Controls	2,444	18	98,000	5,000	2	There are plans to replace boilers this summer for more efficient ones with better controls.
Fitting of Magnetic Filters to the heating system	1,200	9	49,000	4,500	3.75	See comment above.
Removal of	1,000	4.5	10,000	0	0	Once the boilers are

portable heaters						replaced and the heating is more reliable the portable heaters will be removed.
Closure of the annex	4,000	26	60,000	0	0	The use of this building is being reviewed with a view to letting it to a third party although the heating is switched off where possible.
Install Solar PV	15,111	41	92,600	120,000	8	The condition and configuration of the roofs is not suitable for installation of solar panels without major capital investment.
Total	38,271			158,860	4.2	

ACTION PLAN – Fleetwood Market

Recommendation	Estimated Annual Savings			Estimated Cost	Payback Period	Update
	£	CO2 tonnes	kWh			
Implement an Energy Management System	2,617	13	50,386	5000	1.9	This concerned the implementation of a management system and tools and techniques e.g. control systems and it remains an outstanding action.
Lighting Replacement Main Hall	3,312	14	31,824	8,700	2.6	This is a major investment; not just in the cost of replacements but also in closure of the market to enable the work to take place. Discussions are ongoing about backlog repair and maintenance and investment will be prioritised as

						funding becomes available.
Heating Controls	3,500	26	142,000	10,000	2.8	This concerned the commissioning of a detailed survey to assess potential savings and costs and remains an outstanding action. The heating controls were, however, modified in 2011 with built in optimisation to take into account time schedules and temperatures in all zones. Further improvement is not possible without replacing the heating system.
Install Solar PV	26,360	71	160,000	192,000	7.2	The condition of the roof prevents the installation of solar panel without major capital investment.
Total	35,789			215,700	6.0	

In addition to the above, as part of a rolling programme in all centres emergency lights are being replaced with LED fittings, which give better results and are more energy efficient.

Conclusion

The recommendations provided by Strategic Energy Consulting are very conservative where costings are concerned and are quite optimistic in the efficiency savings making the pay-back periods much longer than stated. As part of the Asset Management Plan energy efficiency is always considered when undertaking new construction projects or renovating existing buildings even though there is no written energy management policy.

Maria Blundy
Head of Built Environment

9 July 2015