

Report for: ACTION



Contains Confidential or Exempt Information	PART I – Main report
Title	Energy Reduction Manager Update
Responsible Officer(s)	Craig Miller, Head of Community Protection & Enforcement Services
Contact officer, job title and phone number	Michael Potter, Energy Reduction Manager Tel: 01628 68 2949
Member reporting	Cllr Coppinger, Lead Member for Sustainability
For Consideration By	Sustainability Panel
Date to be Considered	29th November 2016
Implementation Date if Not Called In	Immediately
Affected Wards	All

REPORT SUMMARY

1. This report provides an overview of the progress being made to deliver the Council's energy reduction strategy.
2. This update report recommends that Members note progress on the building LED lighting project phase 2, RBWM Energy Switch to Save, Town Hall BMS project, Propelair low flush toilets and comment on the proposed work plan until the next Sustainability Panel. It recommends that the LED lighting project is approved.
3. Recommendations are being made because it is important that Members provide comment and direction on the work being carried out and that the sustainability strategy targets are met.

If recommendations are adopted, how will residents benefit?

Benefits to residents and reasons why they will benefit	Dates by which residents can expect to notice a difference
1. By reducing utility and waste costs, the Borough is providing better value for money to its residents.	March 2017

1. DETAILS OF RECOMMENDATIONS

RECOMMENDATION: the Panel are asked to note the progress made and comment on the proposed work plan over the next period as detailed in paragraph 17.24.

RECOMMENDATION: the Panel are asked to approve the building LED lighting project phase 2 subject to procurement rules at a cost of £35,000 using the CY03 capital code. Also, that delegation be given to the Head of Community Protection & Enforcement Services (Craig Miller), in consultation with the Lead Member for Sustainability, to review any variance of the cost following a tender exercise.

2. REASON FOR RECOMMENDATION(S) AND OPTIONS CONSIDERED

2.1 The Council is currently working towards a four year Sustainability Strategy running from April 2014 to March 2018. The strategy focuses on 6 workstreams including: Sustainability, Energy, Water, Waste, Transport and Renewable Generation. The strategy has three key targets over the four year period which are:

1. Reduce energy use in the Council building estate by 15% in 2017/18 compared to a 2013/2014 baseline.
2. Reduce water usage in the Council's corporate office buildings by 3% in 2017/18 compared to a 2013/2014 baseline.
3. Recycling rates increased to 55% in 2017/18.

Each year an action plan is drawn up to enable the Council to meet these targets as well as other goals presented in the strategy documents. This update provides a progress report for the energy workstream.

After the first two years of the strategy the 2013/2014 energy baseline has been reduced by 12.5%. This equates to the Council avoiding just under £130,000 of energy costs over these two years.

Option	Comments
(a) The Council does not work towards the sustainability strategy. This is not recommended	(a) Failing to work towards the sustainability strategy would mean the Council would not be able to meet its legislative commitments, would not be able to continually drive down energy costs and therefore would not be offering value for money for its residents.
(b) The Council works according to the current and any future sustainability strategy. This is the	(b) The Council will be able to meet all its legal requirements whilst improving the local environment and providing value for money for its residents.

Option	Comments
recommended option	
(c) Members of the panel are asked to approve the building LED lighting project phase 2. This is the recommended option	(c) This work will enable the Council to meet some of its energy reduction target and it will help reduce revenue expenditure by an estimated £6.5k per annum.

3. KEY IMPLICATIONS

Defined Outcomes	Unmet	Met	Exceeded	Significantly Exceeded	Date they should be delivered by
Overall reduction of annual gas and electricity consumption in Council buildings in 2016/17 compared to the 2013/14 baseline.	<11%	11-12%	12.1-13%	>13%	31 st March 2017

4. FINANCIAL DETAILS

Financial impact on the budget

- 4.1 If approved the highlighted projects for LED lighting will require capital expenditure of £35,000. It is anticipated that this expenditure will come from the 2016/17 CY03 capital code.

5. LEGAL IMPLICATIONS

- 5.1 Should the panel choose to approve the recommendation of a trial of low flush toilets and LED lighting then the suppliers will be procured according to contract rules.

6. VALUE FOR MONEY

- 6.1 The work to reduce the Council's energy and water usage will provide residents with better value for money if the Council continues to reduce energy and water usage as projected.

7. SUSTAINABILITY IMPACT APPRAISAL

- 7.1 All the work referred to in this update relate to improving the sustainability of the Council.

8. RISK MANAGEMENT

Risks	Uncontrolled Risk	Controls	Controlled Risk
Targets for overall energy and water reduction are not met.	High	By providing updates at each panel meeting, Members are able to keep track of overall progress to ensure the Council meets its annual projected reductions and savings commitments.	Low
Increasing energy and water costs for the council puts additional pressures on budgets.	High	By providing updates at Panel meetings on progress to reduce energy and water usage and progress on securing the best available energy contracts, Members will be able to assess the work that is taking place to ensure that cost increases are minimised as far as possible.	Low

9. LINKS TO STRATEGIC OBJECTIVES

9.1 The Energy Manager's Update meets the following strategic priorities of the Council:

Residents First

- Improve the Environment, Economy and Transport
- Work for safer and stronger communities

Value for Money

- Deliver Economic Services
- Improve the use of technology
- Invest in the future

Delivering Together

- Enhanced Customer Services
- Deliver Effective Services
- Strengthen Partnerships

Equipping Ourselves for the Future

- Equipping Our Workforce
- Developing Our systems and Structures
- Changing Our Culture

10. EQUALITIES, HUMAN RIGHTS AND COMMUNITY COHESION

10.1 There are no direct equalities, human rights or community cohesion implications arising from this report.

11. STAFFING/WORKFORCE AND ACCOMMODATION IMPLICATIONS

11.1 There are no direct staffing/accommodation implications arising from this report.

12. PROPERTY AND ASSETS

12.1 This update contains content relating to the improvement of the Council's buildings and the information collated about them.

13. ANY OTHER IMPLICATIONS

13.1 There are no other implications.

14. CONSULTATION

14.1 No formal consultation has been carried out.

15. TIMETABLE FOR IMPLEMENTATION

Date	Details
31/03/2017	Completion of current annual plan.

16. APPENDICES

16.1 None

17. BACKGROUND INFORMATION

Building LED Lighting project phase 2

17.1 At the July Sustainability Panel 15 sites were proposed as potential sites for a second LED lighting upgrade phase. Following further investigations it was found that 7 of the remaining 15 sites would be suitable for upgrading. These 7 sites are:

- Maidenhead Library
- Windsor Library (small number of lights identified)
- Guildhall public toilets
- Victoria Street Car Park toilets
- Maidenhead Town Hall (small number of lights identified)
- Boyne Grove Community Research Centre
- Braywick Nature Centre

17.1 It is envisioned that the project would be a retrofit upgrade and purely replace the existing lamps included within the project scope (currently 750 lamps). Whole

fittings maybe replaced if this is advantageous or if there are specific problems with a fitting though. Dimmable lamps will be used in appropriate places e.g. less frequently used areas such as toilets.

- 17.2 The lighting upgrade is expected to cost £35,000 based on current estimates. The replaced lamps will save 60% of current energy usage which will create a revenue saving for the Council of an estimated £6.5k per annum. Individual site paybacks will vary depending on the length of time the lights are in use and the types of lights being upgraded. Overall the project is expected to payback in 5 years allowing some contingency. This is slightly longer than the phase 1 project which is due to payback in just over 2 years. The main reason for this is that the phase 1 project included very large savings generated from Hines Meadow Car Park.
- 17.3 Further to revenue cost savings the LED lighting will provide further benefits over the existing florescent lighting. Due to the fact that the LED lamps can last for 5 years this means there will be a reduced number of maintenance call outs and that replacement lamp costs will be reduced. Since LED lamps are more efficient this will reduce the electrical demand of buildings where the lamps are replaced and both reduce carbon emissions and the Council's future electrical capacity charges. LED lighting does not flicker or buzz at the end of its life like florescent lighting can do. LED lighting also maintains the light levels over its life much better than a florescent light will.
- 17.4 If the project is approved, the 2016/17 CY03 capital budget will be used for this project.

RBWM Energy Switch to Save

- 17.5 The Council's first energy switching campaign has now ended after almost 3 months of being live. Whilst the levels of registration have not been as high as hoped (55 at the auction) it is promising to see that some great savings have been available for our residents. Residents have also had the opportunity to register after the auction date at the same rates achieved at the auction. The winning supplier was SSE for all tariff types other than prepayment meters. Robin Hood Energy won the prepayment tariffs. The tariffs offered by SSE were exclusive to the auction, however, Robin Hood Energy used its existing market leading tariff for prepayment meters to win those customers.
- 17.6 The potential average household saving in the borough following the auction process was £244.74. This is the highest potential saving of any local authority in the scheme. However, interestingly only 65% of registrants could actually make a saving by switching supplier. This percentage came out at around the median of all authorities in a rankings table. Potentially this is highlighting a number of things: that both regular switchers and irregular switchers registered; that the irregular switchers have not switched for a very long time and are on variable rate tariffs; that there is a core group of savvy regular switchers that were interested in the scheme. There were no offline registrations prior to the auction and this is showing that the message is perhaps not reaching all areas of the borough. The three most cited ways that residents stated they found out about the scheme were Council website, newspaper and social media respectively.
- 17.7 Further information will become available for analysis in early December after the switching period has closed. At this point the final number of people that have

switched supplier will be known, what the overall saving was for the borough, what the final average saving per household was, if there are any residents that were willing to share their information with the Council (this may lead to a case study) as well as other interesting facts about the borough's first auction.

- 17.8 As a minimum the Council must partake in one switching campaign each year for the next two years. Ichoosr run three auctions a year and so the Council can choose to participate 1 to 3 times a year. It would be good to maintain momentum and participate in as many auctions as possible but the level of commitment will need to be agreed with the relevant internal teams. The next auction is the 14th February and registration opens 6th December. There is also an auction on 23rd May.

Town Hall BMS project

- 17.9 Unfortunately the Town Hall building management system (BMS) project has been held up within shared building services. The tender documentation is still in the process of being revised. The delays have meant that it is no longer possible to complete the project before the end of the calendar year. Once the tender process is complete a full timetable will be issued.

Water Saving Toilet trial

- 17.10 Two local authority customers of Propelair toilets have been contacted to find out their opinions on the Propelair toilets they have installed. This was to determine maintenance levels of the toilets themselves, if there were any issues with drainage and how staff/ the general public have found using the toilets.
- 17.11 London Borough of Redbridge installed the toilets throughout a 13 storey office block about a year ago. Overall their experience of the toilet has been very positive. They shared the following information:
- There have been no maintenance issues in the first year.
 - The drains have improved from the change – blockages were commonplace (roughly 3 a week) before the installation. Since the installation there have not been any blockages.
 - Initially people using the toilets didn't like using the toilets for hygiene reasons i.e. having to touch the seat before and after using the toilet. However, after a period of adjustment people are now using the toilets without any major concern. It should be noted that the version of the toilet installed is a slightly older model and the toilet lid handle is not impregnated with antimicrobial additives to improve hygiene. The toilet lid now has this included as standard.
 - There has been a reduction of smells in the toilets.
 - Water savings achieved as expected.
- 17.12 Brighton and Hove City Council installed the toilets in the Brighton pavilion public toilets 2 years ago. Due to their location these toilets were heavily used and costing around £10k a year in water costs. They have halved their water costs by installing the toilets to replace their old 10L cisterns. Comments made with regards to their experiences were:

- There were some initial problems with drainage. Following a survey it was determined that this was not the fault of the Propelair toilet but was

actually due to needles being flushed down the loo. It was recommended that a drain survey was carried out prior to installation.

- Maintenance costs have been very low. A bit more maintenance was carried out in year two but still low cost. Propelair have trained the Council's maintenance contractor how to repair the toilets.
- That the toilets can shudder when they flush.
- That people don't like touching the lid as well as the flush button. It would be better to have a sensor flush.
- Less than 10 complaints in two years with 150,000 people using the toilets a year.
- The toilet seals have discoloured.

17.13 Overall both references were happy with the product and one was considering installing more. It was noted, however, that the payback is not always favourable and that it is best where the old cisterns are large and the toilets are heavily used.

17.14 Propelair have provided their call out log figures for 2016. These figures were adjusted to a full year and are presented below. There are currently 2327 units installed.

Damage/ Mis-use	29	1.25%
Water Level	7	0.31%
Parts/ Warranty	33	1.40%
Blockage/ Drainage issue	12	0.52%
Installer Issues	7	0.31%
	<u>88</u>	<u>3.79%</u>

Overall call-out levels are reasonably low, however, parts/ warranty is the most likely reason for a call out.

17.15 Propelair have said that they will not reduce the cost of the toilets for the Council's trial in the Town Hall. If the Council was to commit to a larger number of toilets but install in phases then they would charge us the appropriate percentage reduction on all the toilets. With the maximum reduction of 30% applied, the payback in the Town Hall public toilets is 7.3 years – this requires committing to 100 toilets though.

17.16 Subject to comments from members, although the Propelair toilets would make good water savings and have positive reviews, perhaps a trial is not appropriate at this time due to the cost of the units. It is suggested that this project is reviewed in 6-12 months time to see if there are any other market alternatives/ Propelair have reduced their prices.

17.17 As an alternative to installing the Propelair toilets the Energy Reduction Manager is looking at appropriate controls for urinals, replacement of taps where appropriate, reduction of water pressure to taps where possible and the possibility of reducing the WC cistern capacities by small amounts using water hippos.

Work planned over the next period until the next Sustainability Panel

17.18 The work for the next period includes:

- Working with shared building services on the Town Hall BMS project.
- Working on the LED upgrade programme phase 2 tender documentation.
- Further development of schools energy saving competition.
- Development of staff energy awareness scheme.
- Further investigations into water saving measures.

18. CONSULTATION (MANDATORY)

Name of consultee	Post held and Department	Date sent	Date received	See comments in paragraph:
Internal				
Lisa Pigeon	Environmental Health Lead, Operations	01/11/2016	10/11/2016	Throughout
Cllr Coppinger	Lead member for Sustainability	10/11/2016	10/11/2016	
Cllr Mills	Chairman of the Sustainability Panel	10/11/2016		

REPORT HISTORY

Decision type:	Urgency item?
Non-key decision	No

Full name of report author	Job title	Full contact no:
Michael Potter	Energy Reduction Manager	01628 682949