

Title: <b>Energy Reduction Manager Update</b>
Contains Confidential or Exempt Information?: <i>NO - Part I</i>
Member reporting: Councillor Coppinger, Lead Member for Sustainability
Meeting and Date: Sustainability Panel - 18th September 2017
Responsible Officer(s): Andy Jeffs, Strategic Director Craig Miller, Head of Community Protection & Enforcement Services
Wards affected: All

## REPORT SUMMARY

1. This report provides an overview of the progress being made to deliver the Council's energy and water reduction strategy.
2. This update report recommends that Members note progress and comment on the proposed work plan for the next period. It provides a breakdown of the Council's energy savings, information on a Southampton City Council white label scheme, an update on the Town Hall building management system & LED lighting phase 2 projects and an update on the Energy Switch to Save Scheme. A recommendation is made that the Council signs a letter of support for Southampton City Council's white label scheme.
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.

## 1. DETAILS OF RECOMMENDATION(S)

**RECOMMENDATION:** That the Sustainability Panel notes the report, the progress made and comments on the proposed work plan over the next period as detailed in paragraph 11.18.

**RECOMMENDATION:** That the Sustainability Panel approves signing a letter of support for Southampton City Council's energy white label scheme proposal based on the information received.

## 2. REASON(S) 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.

2.2 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.

2.3 After the first three years of the strategy the 2013/2014 energy baseline has been reduced by 15%. This equates to the Council avoiding just over £300,000 of energy costs over these three years.

### 2.4 Table 1: Report options

Option	Comments
(a) The Council does not work towards the sustainability strategy. <b>This is not recommended</b>	(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. <b>This is the recommended option</b>	(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.
(c) The Council support Southampton City Council's proposal for a white label scheme. <b>This is the recommended option</b>	c) The scheme will help the Council to reduce fuel poverty, get non switchers switching, receive an income and help to support residents to reduce their energy consumption.

### 3. KEY IMPLICATIONS

#### 3.1 Table 2: Target outcome following report

Outcome	Unmet	Met	Exceeded	Significantly Exceeded	Date of delivery
Overall reduction of annual gas and electricity consumption in Council buildings in 2017/18 compared to the 2013/14 baseline.	<15%	15-16%	16.1-17%	>17%	31 <sup>st</sup> March 2018
Reduction of water consumption in Council office buildings in 2017/18 compared to the 2013/14 baseline.	<3%	3.0-3.5%	3.6-4.0%	>4%	31 <sup>st</sup> March 2018

### 4. FINANCIAL DETAILS / VALUE FOR MONEY

4.1 No new funds are being sought through this paper.

### 5. LEGAL IMPLICATIONS

5.1 None.

### 6. RISK MANAGEMENT

#### 6.1 Table 4: Risks for Sustainability Strategy actions.

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	Low

<b>Risks</b>	<b>Uncontrolled Risk</b>	<b>Controls</b>	<b>Controlled Risk</b>
		commitments.	
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

## **7. POTENTIAL IMPACTS**

- 7.1 This update contains content relating to the sustainable improvement of the Council's buildings and the information collated about them.
- 7.2 No equality impact assessment has been carried out.

## **8. CONSULTATION**

- 8.1 None

## **9. TIMETABLE FOR IMPLEMENTATION**

### **9.1 Table 5: Timetable**

<b>Date</b>	<b>Details</b>
31/03/2018	Completion of current annual plan.

## **10. APPENDICES**

- 10.1 Appendix 1 - Electrical avoided cost saving in 2016/17 compared to 2013/14 baseline broken down by site and project.
- 10.2 Appendix 2 - Briefing Paper - Southampton Energy Supply Company Proposal.
- 10.3 Appendix 3 - Letter of interest in Southampton City Council white label.
- 10.4 Appendix 4 – Heat mapping of Energy Switch to Save auctions over two auction cycles.

- 10.5 Appendix 5 – Location of Energy Switch to Save registrations plotted against average income in middle layer SOAs.

## **11. BACKGROUND DOCUMENTS**

### **Breakdown of energy savings**

- 11.1. A breakdown of the avoided cost savings for 2016/17 is provided in appendix 1. The table shows avoided cost savings which are the savings achieved when the baseline consumption is compared to the 2016/17 consumption and multiplied by 2016/17 unit rates.
- 11.2. The table shows savings have been made at a wide range of buildings. Clearly the savings made at Hines Meadow Car Park eclipse the savings made at any other site but there are some great savings being made across the portfolio. Overall the energy savings and feed in tariff income for the Town Hall solar panels provide the second largest site saving followed by lighting works carried out at Stafferton Way Car Park under the RE:FIT contract.

### **Southampton White Label Scheme – municipal energy**

- 11.3. There is a plan for a collaboration of local authorities in the south of England to form an energy company. The initial work on this project has been carried out by Southampton City Council (see appendix 2 – briefing paper) with support from APSE Energy. APSE (Association for Public Service Excellence) Energy are a not for profit local government body which works with over 300 Council's in the UK.
- 11.4. The principal aims of this municipal energy project are to help to alleviate fuel poverty and to help people who do not normally switch supplier to switch to a more favourable tariff. A fuel poor household is defined as one which needs to spend more than 10% of its income on all fuel use when the home is heated to an adequate standard of warmth. There are also further aims of providing an income stream, helping to improve energy efficiency in the local areas and also to create a platform for future energy generation projects. The energy efficiency and generation aims can both contribute to improving the environment. Since Southampton City Council will not be focusing on profits for themselves unlike most other energy companies this will give them an advantage in providing low tariffs as well as giving them scope to provide local change.
- 11.5. Initially the municipal energy project is not going for a full supplier licence due to the cost (£2-4m) and lack of experience in the field. It is perceived that this is a risky proposition at this stage. The project is therefore looking to agree a white label 'plus' arrangement with a supplier. A white label is a registered brand that has a contractual agreement with a fully licensed energy company to sell electric and gas to customers. As an example, this is similar to the arrangement Sainsburys Energy have with British Gas. The white label would be branded by Southampton City Council (yet to be decided) as well as the logo (yet to be decided), the company would have a website for the public to view and would appear on switching services. The energy supplier behind the

white label would organise all the administration and carry out all the energy supply in much the same way as a normal energy supplier would.

- 11.6. The 'plus' element to the white label has come about due to the intention to move to a full supplier licence in the future. Normally under a white label approach the partner to the energy supplier would not be involved with the running of a supply company. Since the intention is to move to a full supply licence in the future it makes sense to try and gain experience in the field before moving into it. It is hoped that under an improved partnership agreement with the supplier that experience in running a supply company could be gained. Further to this, under a normal white label agreement the customers at the end of white label would remain with the supply company. Clearly if you are becoming an energy supplier then this customer base would be very useful. It is hoped that an agreement can be made where this customer base could be passed to the newly set up supplier.
- 11.7. Fuel poverty is driven by three key factors: energy efficiency of the home; energy costs and household income. Two of these factors can be tackled through a municipal energy company – home energy efficiency and energy costs. It is proposed that the energy tariff structures would be set up differently to normal suppliers in the white label plus arrangement. It is hoped that there will be no short term low price contracts and no high variable rate at the end of a fixed period. This will mean that there is a standard low price tariff and continued low prices for the customer. The company would re-invest in the community to improve home energy efficiency with any profits initially.
- 11.8. Currently Southampton City Council are seeking a letter of support (appendix 3) from southern local authorities. Initially this support would be used as evidence in a tender they will be running in September/ October for their energy white label supplier. It is thought the more support is shown the more control they will have over the white label 'plus' contract. This letter of support does not legally bind the Council into anything, it is purely to show any potential tenderers the level of support in the region and hence the potential customer base.
- 11.9. In terms of what the Council will need to do and what it might get out of any future white label agreement. Southampton City Council has said initially that the Council would need to carry out marketing of the scheme in the borough and in return the Council would receive a rebate for each resident that switches. This arrangement is very similar to the current arrangements with Ichoosr for the RBWM Energy Switch to Save Scheme. The Council would not be responsible for any call handling though. It should be noted that this is the initial phase of the scheme and going forward if the scheme is successful there may be scope for energy efficiency works in the borough to help those in need.
- 11.10. It is recommended that the Council shows its initial support for the scheme. It doesn't tie the Council into anything and the scheme has potential for working well across the south. The Council does, however, need to remember that it is already part of an energy switching scheme. In the agreement for this scheme the Council is legally obliged to take part in one auction per year for three

years. The first year's requirement has now been satisfied and the second year's requirement will be satisfied through the upcoming October auction. This means that legally, should the Council want to, it could do one more auction in October next year and then stop the Energy Switch to Save Scheme. The Council could then move to the Southampton City Council's white label scheme.

11.11. Another option is for the Council to show its support as is recommended and then run both the Energy Switch to Save scheme and the Southampton scheme at the same time as soon as the white label is set up. This would mean that the Council is supporting the white label and running a collective switching scheme at the same time. This could cause confusion, however, Ichoosr believe that there is merit in running both schemes in unison. This is because the different schemes may appeal to different residents. The marketing of the schemes will need to be clear if the Council goes down this route. Another point to note is that since the white label company will be acting as a supplier they will be able to bid in the Energy Switch to Save scheme auction.

11.12. Alternatively the Council could not register its support for the Southampton white label and then just see how the scheme goes over the first couple of years. If the scheme is running well then the Council could look into joining the scheme after the end of the Ichoosr 3 year term in July 2019.

#### **Building Management System & LED lighting phase 2 projects**

11.13. The Town Hall Building Management System project is currently underway and is scheduled to be completed before the winter heating season. The key areas of work have been/ are – replacing the controls units in the main boiler room, the chiller room and the Desborough suite boiler room; laying new cables to form a localised BMS network; connecting the BMS system to the air conditioning system; connecting the BMS system to the downstairs fan coil units; installing system software and connecting to the intranet. Much of this work is complete and the final touches are currently being made.

11.14. As an addition to the main project an upgrade is being made to the boilers to allow them to fully modulate. Modulation of the boilers means that the boiler load can be increased/ decreased in a linear manner according to the required set point temperatures. The new controls software is able to fully control the boiler modulation as well as the sequencing of the boilers to ensure all boilers are used in the most efficient loading pattern for the required demand for heat. This will increase both the efficiency of the boilers and help to optimise temperature control in the building.

11.15. The LED project has unfortunately been slightly delayed. A trial of the new lights has been completed at the library but it was decided that the lamps installed needed to be a slightly brighter to meet the high lighting requirements in the library. This has meant that new lamps needed to be manufactured. Further to this, other electrical works were being carried out in the library which has caused some programming issues. The work is due to be carried out in the last week of September.

### **Energy Switch to Save Scheme**

- 11.16. Following the first two Energy Switch to Save auctions a review has been carried out to try to understand where the scheme is being taken up and where it is not.
- 11.17. The registrants for both the October 2016 and the February 2017 auctions were plotted on a map of the borough. Appendix 4 shows a heat mapping view of the borough with higher densities of registrants showing up darker on the map. The October 2016 heat map shows that there were registrations in most of the population centres. The most registrations were in Maidenhead followed by Windsor and then Ascot. In certain areas of these towns the heat mapping is quite concentrated and within quite defined areas. When the February 2017 auction heat map is compared to the October 2016 heat map the picture is quite different. The registration heat signature is more spread out in more varied locations. Registrations in Ascot declined significantly too. Registrations in Old Windsor were good at both auctions and Hurley also had a number of registrations too. Cookham, White Waltham, Knowl Hill and Datchet didn't take up the offer as readily.
- 11.18. The registrants were also plotted against average income for the middle layer super output layer (SOA) in appendix 5. SOA is a geographic region used in area statistics with a mean population of 7200 residents. Appendix 5 shows that there were registrations in all the SOA regions. Each SOA region shows its own average income banding by colour coding. It is not clear overall that income affects the uptake of the scheme from the data provided in the map. Instead it appears that registrations are mostly made in the main population centres and does not follow any of the SOA boundaries. The exception to this rule is that in the October 2016 auction there was a much higher registration rate in the lower income areas of Windsor compared to their surrounding areas. This may be due to the way residents found out about the scheme. It is possible that the lower income areas have younger residents that are more internet savvy. Unfortunately there is not a way to overlay the SOA regions with age data at the current time.
- 11.19. The approach to disseminate the message about the auction was slightly different for each auction. The first auction used online media such as the staff bulletin, facebook, twitter, resident email bulletin as well as printed media such as Around the Royal Borough. The second action used these methods but also included fliers in libraries, Town Hall and York House. Additionally the Town Hall, Maidenhead Library, Windsor Library and York House also had pop up banners about the scheme. It is thought the wider reach of the second auction is down to the fliers being available in the libraries. Unfortunately it doesn't appear that the message is getting out in certain areas of the borough.
- 11.20. For the next auction in October the Council has ensured that fliers are once again distributed to all the libraries in the borough. A pop up banner will also be put up in Maidenhead, Windsor and Ascot libraries. This should help to keep the spread of registrations seen in February. Information will also be sent out through all the usual online routes and in the Around the Royal Borough to try and entice internet users.



11.21. As an addition to the campaign this October the Council will also distribute fliers to elderly day centres and various other community centres in the borough. It is hoped that this move will further widen the message as well as get lower income or less able residents involved. The call to register service will remain in place for those that need it this auction as will the online registration process.

#### **Proposed work plan over the next period**

11.22. The work being carried out between now and the next Sustainability Panel will be:

- LED lighting upgrade project installations
- Building Management System upgrade completion
- Investigating the Schools RE:FIT programme
- Staff awareness campaign planning
- Energy Switch to Save scheme
- Initial work on the new Sustainability/ Energy Strategy 2018-2022

## **12. CONSULTATION (MANDATORY)**

<b>Name of consultee</b>	<b>Post held</b>	<b>Date sent</b>	<b>Commented &amp; returned</b>
Cllr Coppinger	Lead Member for Sustainability		
Cllr Mills	Chairman of the Sustainability Panel		
Lisa Pigeon	Environmental Health Lead	14/08/17	24/08/17

### **REPORT HISTORY**

<b>Decision type:</b> Non-key decision	<b>Urgency item?</b> No
Report Author: Michael Potter, Energy Reduction Manager, 01628 682949	