

# Public Document Pack

## NOTICE OF MEETING



# SUSTAINABILITY PANEL

will meet on

**MONDAY, 25TH JANUARY, 2016**

**At 7.30 pm**

in the

**DESBOROUGH 4 - TOWN HALL, MAIDENHEAD SL6 1RF**

TO: MEMBERS OF THE SUSTAINABILITY PANEL

COUNCILLORS DEREK SHARP (CHAIRMAN), DAVID COPPINGER (VICE-CHAIRMAN),  
MARION MILLS, NICOLA PRYER AND LYNDA YONG

SUBSTITUTE MEMBERS

COUNCILLORS MICHAEL AIREY, GERRY CLARK, PHILIP LOVE, JACK RANKIN AND  
EDWARD WILSON

Karen Shepherd - Democratic Services Manager - Issued: 15.01.16

Members of the Press and Public are welcome to attend Part I of this meeting. The agenda is available on the Council's web site at [www.rbwm.gov.uk](http://www.rbwm.gov.uk) or contact the Panel Administrator **Tanya Leftwich** 01628 796345

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## AGENDA

### PART I

<u>ITEM</u>	<u>SUBJECT</u>	<u>PAGE NO</u>
1.	<u>APOLOGIES FOR ABSENCE</u>  To receive any apologies for absence.	-
2.	<u>DECLARATIONS OF INTEREST</u>  To receive declarations of interests from Members of the Panel in respect of any item to be considered at the meeting.	5 - 6
3.	<u>MINUTES</u>  To note the Part I minutes of the meeting of the Panel held on Monday 30 November 2015.	7 - 10
4.	<u>OPEN FORUM</u>  Opening remarks by the Chairman on the Panel's role.	-
5.	<u>STAFF TRAVEL PLAN</u>  By the Transport & Access Team Leader (Lynne Penn), RBWM.	-
6.	<u>TOWN HALL BUILDING MANAGEMENT SYSTEM UPGRADE BUSINESS CASE</u>  By the Energy Reduction Manager (Michael Potter), RBWM.	11 - 18
7.	<u>UPDATE FROM THE ENERGY REDUCTION MANAGER</u>  By the Energy Reduction Manager (Michael Potter), RBWM.	19 - 28
8.	<u>DATE OF FUTURE MEETINGS</u>  The dates of future meetings are as follows (7.30pm start): <ul style="list-style-type: none"><li>Monday 16 May 2016.</li></ul>	-



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## MEMBERS' GUIDANCE NOTE

### DECLARING INTERESTS IN MEETINGS

#### **DISCLOSABLE PECUNIARY INTERESTS (DPIs)**

DPIs include:

- Any employment, office, trade, profession or vocation carried on for profit or gain.
- Any payment or provision of any other financial benefit made in respect of any expenses occurred in carrying out member duties or election expenses.
- Any contract under which goods and services are to be provided/works to be executed which has not been fully discharged.
- Any beneficial interest in land within the area of the relevant authority.
- Any license to occupy land in the area of the relevant authority for a month or longer.
- Any tenancy where the landlord is the relevant authority, and the tenant is a body in which the relevant person has a beneficial interest.
- Any beneficial interest in securities of a body where
  - a) that body has a piece of business or land in the area of the relevant authority, and
  - b) either (i) the total nominal value of the securities exceeds £25,000 or one hundredth of the total issued share capital of that body **or** (ii) the total nominal value of the shares of any one class belonging to the relevant person exceeds one hundredth of the total issued share capital of that class.

#### **PREJUDICIAL INTERESTS**

This is an interest which a reasonable fair minded and informed member of the public would reasonably believe is so significant that it harms or impairs your ability to judge the public interest. That is, your decision making is influenced by your interest that you are not able to impartially consider only relevant issues.

#### **DECLARING INTERESTS**

If you have not disclosed your interest in the register, you **must make** the declaration of interest at the beginning of the meeting, or as soon as you are aware that you have a DPI or Prejudicial Interest. If you have already disclosed the interest in your Register of Interests you are still required to disclose this in the meeting if it relates to the matter being discussed. A member with a DPI or Prejudicial Interest **may make representations at the start of the item but must not take part in discussion or vote at a meeting.** The term 'discussion' has been taken to mean a discussion by the members of the committee or other body determining the issue. You should notify Democratic Services before the meeting of your intention to speak. In order to avoid any accusations of taking part in the discussion or vote, you must move to the public area, having made your representations.

If you have any queries then you should obtain advice from the Legal or Democratic Services Officer before participating in the meeting.

If the interest declared has not been entered on to your Register of Interests, you must notify the Monitoring Officer in writing within the next 28 days following the meeting.

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# Agenda Item 3

## SUSTAINABILITY PANEL

MONDAY, 30 NOVEMBER 2015

PRESENT: Councillors Derek Sharp (Chairman), David Coppinger (Vice-Chairman), Marion Mills, Nicola Pryer and Lynda Yong.

Also in attendance: Paul Daly (Energy Saving Lighting), Ian Davis (Energy Saving Lighting) and Martin Fry (MRF&A / City University).

Officers: Tanya Leftwich and Michael Potter.

### APOLOGIES FOR ABSENCE

No apologies for absence were received.

### DECLARATIONS OF INTEREST

Councillor Marion Mills declared a personal interest in item 7 of the agenda (update from the Energy Reduction Manager) as she sat on two management committees – one in Pinkney's Green and the other at 4 Marlow Road.

The Chairman informed everyone present that the meeting was being recorded and would be made available on the RBWM website.

### MINUTES

The Part I minutes of the meeting held on the 28 September 2015 were agreed as a correct record subject to the following amendment:

To read *"Councillor Mills raised a local residents concerns about the lighting at zebra crossings and the need for adjustments to lights / shielding."*

### OPEN FORUM

The Chairman informed everyone present that the prime objective of the Sustainability Panel was to save energy and carbon tax for the Council and ratepayers but also to look at new technology that would benefit everyone involved.

### RBWM BUILDING LED LIGHTING PROJECT

The Chairman welcomed Paul Daly and Ian Davis (Energy Saving Lighting) to the meeting and invited them to address the Panel.

Paul Daly informed Members that Energy Saving Lighting was based in Winkfield. It was noted that Paul Daly had been involved in LED lighting for six years and in that time had dealt with approximately twenty Local Authorities. Members were informed that Energy Saving Lighting dealt mainly in rewiring and replacing fluorescent lights with LED tubes. LED lighting can save 65% of the light's energy consumption compared to fluorescent lamps.

Paul Daly informed Members that they were starting the trial at Hines Meadow Car Park mainly retro fitting approximately 2700 lamps. Members were informed that motion detectors would be used in the car park so that when it was at low occupancy the lighting levels reduced

to 10% and powered back up to full power when occupancy was detected. It was hoped that the light replacements at Hines Meadow Car Park would be finished by the end of the week.

In the ensuing discussion the following points were noted:

- That LED lights lasted approximately eight years / 50,000 hours compared to non-LED lights which tended to last approximately two years / 12,000 hours.
- Energy Saving Lighting products were 100% recyclable.
- That it was cost effective to purchase LED lights as after a year non-LED tubes were 30% less bright than when first installed and after two years were 50% less bright.
- That the payback on LEDs in car parks was under two years.
- That Energy Saving Lighting were also looking at the Guildhall, Town Hall and libraries.
- That small lights were also available which would reduce a 26 watt lamp to 7 watts.
- That approximately £100,000 could be saved per annum by replacing the lights in the project with LED.
- That Energy Saving Lighting worked with a Japanese company.
- That only the light bulbs in Hines Meadow Car Park were being replaced rather than the whole fittings.
- That LEDs did not give out heat which stopped the fittings turning yellow over time.
- That Energy Saving Lighting sold the LED bulbs online.
- That 600 lumens equated to approximately 60 watts.

The Chairman thanked Paul Daly and Ian Davis for attending and for their informative verbal presentation.

## WATER AMR PROGRAMME REVIEW

The Energy Reduction Manager, Michael Potter, referred Members to pages 13-20 of the agenda and explained that the report provided a review of the current water automatic meter reading (AMR) programme and was intended to give the Sustainability Panel an overview of the progress being made, review the merits and issues and discuss the options for the future. Members were informed that the paper recommended that Members noted the progress of the water AMR project and that the Thames Water AMR trial was continued.

The Energy Reduction Manager explained that the recommendations were being made because it was important that Members provided comment and direction on the work being carried out to ensure value for money. It was also recommended that the Thames Water AMR trial was continued to allow further installations to progress. It was noted that this would increase AMR coverage and therefore the benefits that they would bring.

It was noted that the Panel at its meeting held on 28 July 2014 agreed that water automatic meter reading (AMR) should be trialled using Thames Water. This was because water AMR had three key benefits:

- 1) It allowed monitoring of water usage patterns to help identify water wastage.
- 2) It allowed identification of leaks.
- 3) It ensured accurate billing.

The Energy Reduction Manager explained that the Council had been waiting for the free of charge meter upgrades to happen before the next round of AMR devices were installed. It was noted that the meter exchange process had been taking a very long time to happen, so that had now meant that Thames Water had agreed to progress the remaining AMR installations where meter exchanges were not required. The Energy Reduction Manager informed Members that two of the three free of charge meter exchanges had now been carried out and the final one should be carried out in the next month.

It was noted that an oversized meter has been identified at York House.



Members were informed that the next steps recommended were that the Thames Water trial was continued. It was noted that the next 12 installations should be completed by the end of the year and then there would be 18 AMR units installed.

**UNANIMOUSLY AGREED; That the progress of the water AMR project was noted and that the Thames Water AMR trial was continued to allow further AMR installations to progress.**

## UPDATE FROM THE ENERGY REDUCTION MANAGER

The Energy Reduction Manager referred Members to pages 21-32 of the agenda and explained that the report provided an update and gave the Panel an overview of the progress being made to deliver the Panel's energy reduction strategy. It was noted that the paper also proposed setting a recommended heating and cooling temperature in Council offices.

The key areas covered were noted as follows:

- Schools Survey
- Collective Energy Switching
- MaidEnergy Solar Cooperative
- Adopt a building
- Temperature set points
- Website Update
- Work planned over the next period

In the ensuing discussion, the following points were noted:

- That only 22 (mainly primary schools) out of the 64 schools surveyed responded which had been a very disappointing response rate. The Chairman suggested that in order to actively promote schemes schools might need an incentive and possibly a mascot. It was suggested that the Energy Reduction Manager contact the School Leadership Development Manager, Clive Haines, to discuss possible proposals.
- That the Energy Reduction Manager was expecting a 2% sign up to the energy switching scheme with 25% of the sign ups actually progressing with the switch.
- That the Council's procurement section were currently reviewing the offers from Ichoosr and Energyhelpline and that once an analysis had been carried out further information would be brought to a future meeting on how the scheme could be taken forward.
- That the Council now had assurances from the cooperative in the form of a letter that proved that the solar scheme was backed by a loan.
- It was suggested that the keyboard in Reception be removed so the screen could not be changed to show anything other than the solar panel data. It was also noted that the date on information screen was incorrect. It was also suggested that the solar panel data be made more available / accessible.
- It was agreed that the Energy Reduction Manager would check with the Human Resources Team to see if they needed to agree the office temperature set points.
- That raising awareness with staff with regard to the temperature in the workplace (not opening windows, etc) be looked into.
- That a link to the Town Hall solar panel data could be found on the Council's renewables page and links to water saving advice could be found on the water page.
- It was suggested that in order to promote the Council's solar panels moving kilowatt bars to show how much energy was being used and the savings being made should be added to the data screen.
- That work planned over the next period included:
  - Ensuring the LED lighting project continued to run smoothly.
  - Arranging site visits for Adopt a building.
  - Creating a water consumption baseline.

**UNANIMOUSLY AGREED;**

- That the progress made was noted and the proposed work plan was commented on.
- That the target heating temperature in Council offices be set at 21 degrees and the target cooling temperature be set at 24 degrees.

A.O.B.

Maidenhead Waterways Project in Maidenhead

Martin Fry (MRF&A / City University) asked Members whether they would like him to invite Michael Shanley to a future meeting to give his perception on the waterways project.

The Chairman thanked Mr Fry for his kind offer but explained that he did not feel the subject fitted with the Panel as it did not fall under its remit.

DATE OF FUTURE MEETINGS

The Clerk explained that there was now a Conservative event due to be held on the 21 January and that an alternative meeting date would need to be found. The Clerk suggested Monday 25 January as there was a room available and no membership clashes with other Council meetings that evening. The Panel agreed to the change of date and Councillor Mills requested that the Clerk seek a sub for her as she would not be able to attend on the 25 January.

It was noted that the dates of future meetings had been scheduled as follows (7.30pm in the Town Hall):

- Monday 25 January 2016
- Monday 14 March 2016
- Monday 16 May 2016

The meeting, which began at 7.30 pm, finished at 8.55 pm.

CHAIRMAN.....

DATE.....

Report for: ACTION



<b>Contains Confidential or Exempt Information</b>	<i>NO - Part I</i>
<b>Title</b>	<b>Town Hall Building Management System Upgrade Business Case</b>
<b>Responsible Officer(s)</b>	David Scott, Head of Governance, Partnerships, Performance and Policy
<b>Contact officer, job title and phone number</b>	Michael Potter, Energy Reduction Manager, 01628 682949
<b>Member reporting</b>	Cllr Coppinger, Lead Member for Sustainability
<b>For Consideration By</b>	Sustainability Panel
<b>Date to be Considered</b>	25 <sup>th</sup> January 2016
<b>Implementation Date if Not Called In</b>	Immediately
<b>Affected Wards</b>	None

## REPORT SUMMARY

1. This report provides an overview and business case for the upgrade of the Town Hall building management system (BMS).
2. This paper recommends that an upgrade of the Town Hall building management system is implemented.
3. The recommendation is being made because it is important that the Council improves its control of energy usage in the Town Hall. This will help to deliver further energy savings.

## 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 improving the building management controls the Council will be able to provide more efficient and value for money services.	March 2017

## 1. DETAILS OF RECOMMENDATION

**RECOMMENDATION:** that the upgrade of the Town Hall building management system (BMS) be approved and be funded from the Energy Initiatives capital budget.

## 2. REASON FOR RECOMMENDATION(S) AND OPTIONS CONSIDERED

- 2.1 The business case highlights the need to replace and upgrade the existing Town Hall building management system (BMS). The BMS currently controls the boiler, hot water cylinder and chiller systems and due to its age it can no longer be maintained or accessed by relevant staff. This lack of control means that energy is not being properly controlled in the Town Hall.

Option	Comments
The Council does not upgrade the Town Hall building management system. <b>This is not recommended</b>	Failing to upgrade the building management system at the Town Hall would mean that the proper controls are not in place to manage energy effectively.
The Council upgrades the Town Hall building management system. <b>This is the recommended option</b>	The Council would be able to effectively control energy in the Town Hall by maximising the control algorithms of the main energy using plant.

## 3. KEY IMPLICATIONS

Defined Outcomes	Unmet	Met	Exceeded	Significantly Exceeded	Date they should be delivered by
Overall percentage reduction of gas and electricity compared to 2013/14 baseline.	>11%	11%-11.5%	11.6%-12%	>12%	31 <sup>st</sup> March 2017

## 4. FINANCIAL DETAILS

### Financial impact on the budget

	2015/16	2016/17	2017/18
	Capital £'000	Capital £'000	Capital £'000
	£0	£30	£0

- 4.1 This project to be funded from the existing Energy Efficiency Initiatives capital budget.
- 4.2 It is expected that a revenue saving in the region of £2.5k per annum could be achieved by carrying out the upgrade. Electrical savings may be made by expanding the system controls to cover the air conditioning systems.

## 5. LEGAL IMPLICATIONS

- 5.1 The upgraded control system will accord with the Workplace (Health, Safety and Welfare) Regulations 1992, which lay down particular requirements for most aspects of the working environment. Regulation 7 deals specifically with the temperature in indoor workplaces and states that:

*‘During working hours, the temperature in all workplaces inside buildings shall be reasonable.’*

- 5.2 A contract will be tendered and awarded in accordance with the Council’s contract rules.

## 6. VALUE FOR MONEY

- 6.1 Work to reduce the Council’s energy usage will provide residents with value for money by reducing ongoing revenue expenditure. By upgrading the Town Hall building control system the Council will be able to better control the Town Hall’s energy consumption.

## 7. SUSTAINABILITY IMPACT APPRAISAL

- 7.1 This project relates to improving the control of energy in buildings which will help to improve the sustainability of the Council by reducing energy usage and by improving operational processes. The upgrades will help to improve business continuity through better fault reporting.

## 8. RISK MANAGEMENT

<b>Risks</b>	<b>Uncontrolled Risk</b>	<b>Controls</b>	<b>Controlled Risk</b>
Targets for overall energy reduction are not met.	High	By installing appropriate building energy controls the Council will be able to limit waste and inefficiencies.	Low
Increasing energy costs for the council puts additional pressures on budgets.	High	By improving the building energy control system the Council can better control energy costs as well as officer costs dealing with temperature/ control issues.	Low
Heating and cooling plant faults are not highlighted as they occur	High	An up to date building management system will ensure that faults are highlighted to the relevant staff as soon as they occur.	Low
Extensions to the building management system are not possible	Medium	A new building management system will allow extensions to the system which will ensure better control of the building and therefore its energy consumption	Low

## **9. LINKS TO STRATEGIC OBJECTIVES**

9.1 The building management system upgrade meets the following strategic priorities of the Council:

### **Residents First**

- Improve the Environment, Economy and Transport

### **Value for Money**

- Improve the use of technology
- Invest in the future

### **Delivering Together**

- Deliver Effective Services

### **Equipping Ourselves for the Future**

- Equipping Our Workforce
- Developing Our systems and Structures

## **10. EQUALITIES, HUMAN RIGHTS AND COMMUNITY COHESION**

10.1 Staff should have comfortable office working temperatures in order to carry out their work as set out in the Workplace (Health, Safety and Welfare) Regulations 1992, which states that a minimum working temperature of 16 degrees must be achieved.

## **11. STAFFING/WORKFORCE AND ACCOMMODATION IMPLICATIONS**

11.1 The proposed Town Hall controls upgrade should help to provide improved working conditions and will enable adjustments to building controls remotely.

## **12. PROPERTY AND ASSETS**

12.1 This project contains content relating to the improvement of the Town Hall's building controls.

## **13. ANY OTHER IMPLICATIONS**

13.1 None

## **14. CONSULTATION**

14.1 None

## **15. TIMETABLE FOR IMPLEMENTATION**

15.1 The current proposed timetable for implementation is as follows:

<b>Date</b>	<b>Details</b>
1 <sup>st</sup> February 2016	Tender document preparation commences
31 <sup>st</sup> May 2016	Tender documents issued

<b>Date</b>	<b>Details</b>
30 <sup>th</sup> June 2016	Tender documents returned
31 <sup>st</sup> July 2016	Contractor agreed & contract commences
30 <sup>th</sup> September 2016	Works complete

The timetable is subject to change following further internal consultation.

## **16. APPENDICES**

16.1 None

## **17. BACKGROUND INFORMATION**

### **Current Town Hall control system**

17.1 Currently the Town Hall has three building control system (BMS) control panels. The main control panel controls the main boiler system across most of the Town Hall and a hot water cylinder which provides hot water to the toilets. A second control panel controls the chiller system and various pumps which heat and cool ground floor areas such as the customer contact centre. A third panel controls a hot water cylinder and boiler for the café and Desborough suite. There is also a further separate controller for the air conditioning units.

17.2 Unfortunately the current control system is old and was last upgraded in 2006. When the system was last upgraded there was support available to allow repairs and maintenance to occur. However, this is no longer available since no companies in the UK provide support services for the particular system in place. This therefore means that the controls can no longer be maintained nor can they be upgraded as required.

17.3 Further to this, following the upgrade of the Council's IT infrastructure, it is no longer possible for the control system to be controlled on the Council's servers, which means that officers does not have access to the system controls to make adjustments.

### **Update of the existing building management controls**

17.4 The current building management system is currently working on autopilot to its original control algorithms. Although some control is maintained, it is no longer possible to maintain the system to its optimum operation. Adjustments and upgrades of the existing system are no longer possible. It is therefore recommended that the building management system is replaced with a modern system which will allow adjustments and optimisations. Without the upgrade the Council would be potentially using more energy than is required.

### **Extension of the controls**

17.5 The Town Hall control system was designed before the building refurbishment. This has lead to the situation where certain aspects to the building energy consumption are not being controlled centrally through the building management system. An area for concern is that the air conditioning units are being controlled by their own controls entirely separate to the main building controls. This can potentially lead to a conflict of systems which leads to increased energy usage, i.e. air conditioners cooling when the main boilers are heating. This air

conditioning control unit should be connected to the main building management system (BMS).

**Connection of the three Town Hall Building Management Systems (BMS) to a central control platform**

- 17.6 Currently the three BMS panels at the Town Hall are working independently of each other. Ideally, the controls for one building should work in unison and the controls should be accessed in one central place. This is to ensure that the controls are easily accessed by the user and that they do not conflict with each other. It is recommended that the user interface for the BMS system controls all of the Town Hall control panels from one point of access.
- 17.7 There are two methods for achieving a central control portal, either through the Council's servers or externally via a web portal. Currently discussions are ongoing with IT to determine the best option to link the systems.

**Estimated Costs**

- 17.8 Some budgeting costs have been sought from external contractors to determine the extent of the project. To upgrade the Town Hall building management system and connect the air conditioning system to the building management system is estimated to cost in the region of £25k - £30k.

**Savings and further benefits of the upgrade**

- 17.9 The contractors that have been contacted have stated that a 10-15% saving can be achieved by upgrading the building management system. In gas terms this would equate to roughly £2.5k per annum. Further to this the connection of the air conditioning to the system should also yield some electrical savings.
- 17.10 The upgrade is essential to ensure better future performance of the Town Hall's heating system. Currently if a single fault occurred it would not be highlighted to the relevant staff and may continue indefinitely. In the long run this could cause major issues to the comfort of staff working in the building and could also mean that the Council was wasting energy. It is already apparent that there is an overheating problem in certain areas of the Town Hall and this needs to be rectified as soon as possible.
- 17.11 Also, as the building management system can no longer be maintained this means that future upgrades to the control system can not be implemented. For example, control of other equipment such as the fan coil units on the ground floor and the heat recovery units across the building can not be connected to the system in its current state. Future energy saving projects are therefore not possible without this upgrade.

**18. CONSULTATION (MANDATORY)**

<b>Name of consultee</b>	<b>Post held and Department</b>	<b>Date sent</b>	<b>Date received</b>	<b>See comments in paragraph:</b>
<b>Internal</b>				
Andrew Scott	Civic Team Manager	11/01/16	13/01/16	Throughout
David Scott	Head of Governance,	14/01/16	14/01/16	Throughout



<b>Name of consultee</b>	<b>Post held and Department</b>	<b>Date sent</b>	<b>Date received</b>	<b>See comments in paragraph:</b>
	Partnerships, Performance and Policy			
External				

## REPORT HISTORY

<b>Decision type:</b>	<b>Urgency item?</b>
Non-key decision	No

<b>Full name of report author</b>	<b>Job title</b>	<b>Full contact no:</b>
Michael Potter	Energy Reduction Manger	01628 682949

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Report for: ACTION



<b>Contains Confidential or Exempt Information</b>	NO – PART I
<b>Title</b>	<b>Energy Reduction Manager Update</b>
<b>Responsible Officer(s)</b>	David Scott, Head of Governance, Partnerships, Performance and Policy.
<b>Contact officer, job title and phone number</b>	Michael Potter, Energy Reduction Manager, 01628 682949
<b>Member reporting</b>	Cllr Coppinger, Lead Member for Sustainability
<b>For Consideration By</b>	Sustainability Panel
<b>Date to be Considered</b>	25 <sup>th</sup> January 2016
<b>Implementation Date if Not Called In</b>	Immediately
<b>Affected Wards</b>	n/a

## REPORT SUMMARY

1. This report provides an update from the Energy Reduction Manager and is intended to give the Sustainability Panel an overview of the progress being made to deliver the Panel's energy reduction strategy.
2. This paper recommends that Members note progress and comment on the proposed work plan.
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 energy reduction target is 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 energy and waste costs, the Borough is providing better value for money to its residents.	March 2016

## 1. DETAILS OF RECOMMENDATIONS

### RECOMMENDATION: That

- i. the panel note the progress made to date and comment on the proposed work plan over the next period as detailed in paragraph 17.13.
- ii. the proposal to advertise the energy switching scheme in the Around the Royal borough using fliers be approved.

- iii. the installation of a solar monitoring screen similar to those highlighted in paragraph 17.9 be approved.

## 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 work streams including: Sustainability, Energy, Water, Waste, Transport and Renewable Generation. The strategy has three key targets over the four year period which are:

- Reduce energy in the Council building estate by 15% in 2017/18 compared to a 2013/2014 baseline.
- Reduce water usage in the Council's corporate office buildings by 3% in 2017/18 compared to a 2013/2014 baseline.
- Recycling rates increase 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 work stream.

Option	Comments
The Council does not work towards the sustainability strategy. <b>This is not recommended</b>	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.
The Council works according to the current and any future sustainability strategy. <b>This is the recommended option</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.
The Council advertises the energy switching scheme to residents using fliers in Around the Royal Borough. <b>This is the recommended option</b>	If the Council fails to advertise the energy switching scheme to all residents it is likely that the scheme sign up will be lower. Advertising using fliers in Around the Royal Borough is a recommended costs effective way of advertising to the borough's residents.
The Council installs a new solar monitoring screen similar to the fixed screen type found in paragraph 17.10. <b>This is the recommended option</b>	If the Council fails to install the new screen members of the public may not know that the Town Hall has solar panels on the roof since the existing screen is not very pronounced.

## 3. KEY IMPLICATIONS

Defined Outcomes	Unmet	Met	Exceeded	Significantly Exceeded	Date they should be delivered by
Overall reduction of gas and electricity consumption compared to 2013/14 baseline.	<7%	7-8%	8.1-9%	>9%	31 <sup>st</sup> March 2016

#### 4. FINANCIAL DETAILS

##### Financial impact on the budget

Revenue	2015/16	2016/17	2017/18
	Revenue £'000	Revenue £'000	Revenue £'000
	£0	£6	£0

Capital	2015/16	2016/17	2017/18
	Capital £'000	Capital £'000	Capital £'000
	£0	£1	£0

- 4.1 The energy switching project may require funding if the scheme is marketed using fliers in Around the Royal Borough. It is estimated that this would cost £6k. This funding, however, should be recouped through the referral fees paid by the energy switching company. This means as long as enough residents sign up to switch energy supplier that the scheme will be cost neutral. It is anticipated that one of the switching providers would provide referral fees of just over £6k based on the number of households in the borough and the past performance of energy switching schemes.
- 4.2 This use of existing capital relates to the recommendation to install a solar monitoring screen. This cost can be met from the existing Energy Saving Initiatives budget.

#### 5. LEGAL IMPLICATIONS

- 5.1 There are no direct legal implications arising from this report.

#### 6. VALUE FOR MONEY

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

#### 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

<b>Risks</b>	<b>Uncontrolled Risk</b>	<b>Controls</b>	<b>Controlled Risk</b>
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 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
31/03/2016	Completion of current annual plan.

## 16. APPENDICES

16.1 Appendix 1- Comparison of corporate energy consumption between 2013/14 and 2015/16.

## 17. BACKGROUND INFORMATION

### Energy Performance target

17.1 A 5.1% reduction in energy consumption is currently being achieved in the 2015/16 financial year (April – November) compared to the 2013/14 baseline for this period (see Appendix 1 for monthly figures). It is expected that over the final 4 months of the year that further levels of savings will be achieved. This is mainly due to the implementation of the LED lighting project which will start to provide savings from December. Once the LED project and other known savings are taken into account it is expected that there will be a 8.8% reduction over the whole year compared to the baseline.

### Building LED project

17.1 The building LED project is progressing and Hines Meadow Car Park is now almost complete. At the moment the car park is showing just over a 50% reduction in energy consumption, which will deliver 750,000 kWh/ £66,000 of savings over a year. However, this is short of the projected savings of roughly 900,000 kWh. This is unexpected at this site since the number of lights are known as well as the hours that they are on (the two elements of information required to work out energy consumption). The reasons for this shortfall are being investigated and if it is possible will be rectified.

- 17.2 Unfortunately the installation at Hines Meadow took longer than planned due to a number of access issues, which related to problems locating distribution boards and access to certain working areas. This has had a knock on effect with the rest of the programme. However, work is now being carried out at Windsor Library, the Town Hall and the Guildhall and the contractor is endeavouring to make up the lost time. The contractors are still hoping to complete the installations by the end of February, which was the scheduled programme end date.

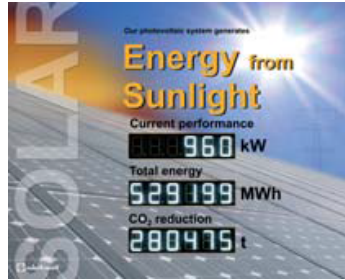
### **Collective Energy Switching**

- 17.3 The initial enquiries relating to the collective energy switching manifesto commitment are complete. The Procurement and Communications teams have provided feed back on the scheme and they both have advised that the implementation of a scheme locally is viable.
- 17.4 The energy switching process will require the Council to market the scheme. The Communications team are able to offer a certain amount of advertisement of the scheme through various routes such as the staff bulletin, website, twitter, facebook, advantage card, Around the Royal Borough, residents e-newsletter. It has also been suggested that parish councils be asked to further publicise the scheme within their parish areas. These items can be delivered without the need for any additional resources.
- 17.5 Further media advertising can be carried out at a cost to the Council such as advertising in local newspapers, radio, bus stops, buses, google etc but it is proposed that these methods be not pursued at this time.
- 17.6 Another option which would reach the widest audience possible in a cost effective way is by sending a flier out with Around the Royal Borough. It was estimated that this would cost between £4.5k and £6k depending on the nature of the flier. This method has been successfully used in the past by the Waste Team in their recycling campaigns. It is worth noting that the Council is not obliged by the energy switching company to spend money on marketing but it has been recommended in order to improve the level of sign up by residents. However, it is likely that the majority, if not all, of this expenditure will be recouped through the referral fees paid by the energy switching company.
- 17.7 The procurement team have reviewed the initial information of the scheme and are now checking over the formal offer contract documents from both energy switching companies. Once this stage is complete the contract will be awarded in accordance with the Council's contract rules.

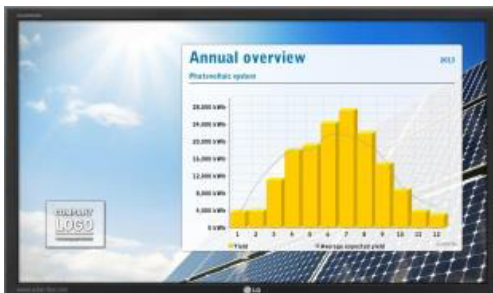
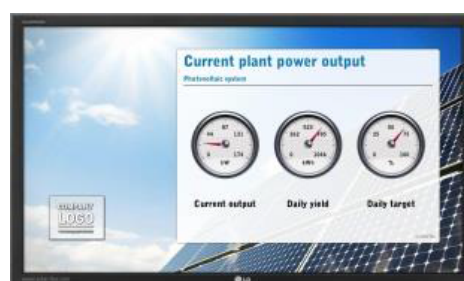
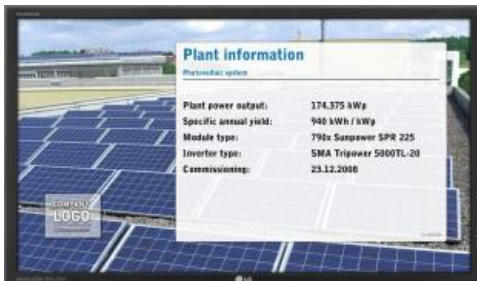
### **Town Hall Solar Display**

- 17.8 A review of the solar panel public displays market has been carried out and there are two different display types currently available.
- 17.9 The first type of solar display screen is one that has a fixed background picture and a LED number display. These screens work by collecting energy generation data from the electric meter and increasing the LED number when a kwh of energy has been generated. Some examples of these types of screens are below:





17.10 The second type of solar display uses an adapted LED TV screen. The whole of this screen is then available for a slideshow of customisable screens showing the generation data. The screen would be connected directly to the internet and would collect the generation data from an online portal. The solar data can also be linked to other energy data as required. Some example screens of this type are:



17.11 Scrolling LED screens have also been investigated but at this time a suitable model has not been found. This is because these screens work on the basis that either a message is typed in to the system and then that message is played in a loop or it is connected to a RSS feed (Rich Site Summary) and the screen receives website information when the information on the website is updated. RSS feeds can be used for information such as news headlines and stock market information. Neither of these scenarios will work with a solar monitoring system as it requires that the message is updated on a regular basis and it is not possible to create an RSS feed for the solar data.

17.12 It is recommended that a screen such as the one found in paragraph 17.10 should be installed in the foyer to provide more of an impact.

### Streetlighting LED project

17.13 The Council is embarking on a LED replacement programme of the streetlighting estate. The LED streetlighting project has now gone out to tender with a view to completing the exercise by the ~~25~~ of the current financial year. In April/May an

energy savings plan will be made available which will then provide an insight into when savings will be achieved and the level of savings to be generated in 2016/17 and 2017/18. The project installation programme is scheduled to start mid 2016 and will continue for an estimated 18 months.

**Work planned over the next period until the next Sustainability Panel**

17.14 The work for the next period includes:

- Ensuring the LED lighting project is delivered to programme.
- Arranging site visits for Adopt a building.
- Creating a water consumption baseline.

**18. CONSULTATION (MANDATORY)**

<b>Name of consultee</b>	<b>Post held and Department</b>	<b>Date sent</b>	<b>Date received</b>	<b>See comments in paragraph:</b>
<b>Internal</b>				
Andrew Scott	Civic Team Manager	11/01/16	13/01/16	Throughout
David Scott	Head of Governance, Partnerships, Performance and Policy	14/01/16	14/01/16	Throughout
<b>External</b>				

**REPORT HISTORY**

<b>Decision type:</b>	<b>Urgency item?</b>
Non-key decision	No

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

## Appendix 1

### Comparison of corporate\* energy consumption (kWh) between 2013/14 and 2015/16

	April	May	June	July	August	September	October	November	December	January	February	March	Total
Electric 13/14	487,098	488,315	426,998	456,868	430,244	465,896	479,073	477,366	526,720	523,727	469,060	509,005	<b>5,740,370</b>
Gas 13/14	153,016	91,357	24,851	18,070	16,475	41,539	92,587	204,155	241,805	298,129	244,641	219,776	<b>1,646,401</b>
	<b>640,114</b>	<b>579,672</b>	<b>451,849</b>	<b>474,938</b>	<b>446,719</b>	<b>507,435</b>	<b>571,660</b>	<b>681,521</b>	<b>768,525</b>	<b>821,856</b>	<b>713,701</b>	<b>728,781</b>	<b>7,386,771</b>
	April	May	June	July	August	September	October	November	December	January	February	March	Total
Electric 15 16	439,417	468,521	405,552	419,979	409,285	413,447	449,471	449,425	0	0	0	0	3,455,097
Gas 15 16	127,008	68,421	30,115	17,134	18,397	32,487	77,622	151,194	0	0	0	0	522,378
	<b>566,425</b>	<b>536,942</b>	<b>435,667</b>	<b>437,113</b>	<b>427,682</b>	<b>445,934</b>	<b>527,093</b>	<b>600,619</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,977,475</b>
kWh Reduction	-73,689	-42,730	-16,182	-37,825	-19,037	-61,501	-44,567	-80,902					-376,433
Cumulative % reduction compared to baseline	-1.0%	-1.6%	-1.8%	-2.3%	-2.6%	-3.4%	-4.0%	-5.1%					

\*Corporate means Council run buildings such as offices, libraries, community and youth centres, park pavilions, public conveniences and car parks.

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