

Public Document Pack

NOTICE OF MEETING



SUSTAINABILITY PANEL

will meet on

MONDAY, 14TH MARCH, 2016

At 7.30 pm

in the

COUNCIL CHAMBER - TOWN HALL, MAIDENHEAD

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: Friday 4 March 2016

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 or contact the Panel Administrator **Tanya Leftwich** 01628 796345

Fire Alarm - In the event of the fire alarm sounding or other emergency, please leave the building quickly and calmly by the nearest exit. Do not stop to collect personal belongings and do not use the lifts. Congregate in the Town Hall Car Park, Park Street, Maidenhead (immediately adjacent to the Town Hall) and do not re-enter the building until told to do so by a member of staff.

Recording of Meetings – The Council allows the filming, recording and photography of public Council meetings. This may be undertaken by the Council itself, or any person attending the meeting. By entering the meeting room you are acknowledging that you may be audio or video recorded and that this recording will be available for public viewing on the RBWM website. If you have any questions regarding the council's policy, please speak to the Democratic Services or Legal representative at the meeting.

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.	3 - 4
3.	<u>MINUTES</u> To note the Part I minutes of the meeting of the Panel held on 25 January 2016.	5 - 10
4.	<u>OPEN FORUM</u> Opening remarks by the Chairman on the Panel's role.	-
5.	<u>MAIDENHEAD DISTRICT ENERGY NETWORK</u> By the Energy Reduction Manager (Michael Potter), RBWM.	11 - 20
6.	<u>UPDATE FROM THE ENERGY REDUCTION MANAGER</u> By the Energy Reduction Manager (Michael Potter), RBWM.	21 - 34
7.	<u>DATE OF FUTURE MEETINGS</u> The dates of future meetings are as follows (7.30pm start in the Council Chamber, Town Hall, Maidenhead): <ul style="list-style-type: none">• 16 May 2016• 12 July 2016• 3 October 2016• 29 November 2016• 19 January 2017• 6 March 2017• 9 May 2017	-

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.

This page is intentionally left blank

Public Document Pack Agenda Item 3

SUSTAINABILITY PANEL

MONDAY, 25 JANUARY 2016

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

Officers: Tanya Leftwich, Lynne Penn, Michael Potter and David Scott.

APOLOGIES FOR ABSENCE

Apologies were received from Councillor Marion Mills - Councillor Ed Wilson was sub.

Apologies were also received from Martin Fry (MRF&A / City University).

DECLARATIONS OF INTEREST

None received.

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 30 November 2015 were agreed as a correct record.

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.

STAFF TRAVEL PLAN

The Transport & Access Team Leader, Lynne Penn, gave Members an update on the Staff Travel Plan.

Members were informed that the Council was in the throws and process of a transport review in order to bring together all elements of transport under one umbrella which the Transport & Access Team Leader had been delegated responsibility for. It was noted that different elements such as fleet, home to school transport, social care transport, community transport and the shop mobility service now came together as one group.

It was noted that in July 2015 the Energy Savings Trust had been invited to meet with the Council to review what had taken place to date (making provision for staff to go about their duties) and to look at the vehicles being used across the Council. A copy of the Energy Savings Trust report would be provided by the Transport & Access Team Leader to the Clerk so that it could be circulated with the minutes. Members were informed that some of the information included in the report for the period 2014 – 2015 was that as a whole the Council had driven 1.69 million miles which equated to 553 tonnes of carbon dioxide. The Transport & Access Team Leader explained that most of that mileage had been staff mileage (1.2 million miles / 71%) which had produced 358 tonnes of carbon dioxide (65%).

Members were informed that the Fleet Manager, Mark Green, now worked for the Transport & Access Team Leader.

Members were informed that a question that would be asked going forward would be:

- ❖ Do you need to travel or can you use telephone and video conferencing facilities instead?

It was noted that whilst all journeys (e.g. by social workers, street care officers, etc) could not be eliminated, the possibility of sharing vehicles, using public transport to conferences and hiring cars might all be an option. It was noted that another big aspect of this was pool cars and whilst there had originally been seven pool cars that had been 'pretty well used' there were a new fleet of fuel-efficient, low-emission vehicles available for business use which were arriving this week (a fleet of thirteen Minis with increased availability based at various Council locations). The Transport & Access Team Leader explained that the Council, through the Staff Travel Plan, hoped to reduce the Council's carbon footprint by making a 30% reduction in the mileage of fleet vehicles and increase efficiency, whilst securing saving for the Council in line with the financial priorities of the Council.

The potential benefits of this initiative were considered to be considerable as travel was one of the Council's most significant expenses, and a great deal of officers' (and members') time was lost shuttling back and forth to meetings. Reducing travel would enable the Council to cut costs and use time more productively.

In the ensuing discussion the following points were noted:

- The Nissan Leafs (electric vehicles) had been leased vehicles based at Tinkers Lane. It was noted that some services going forward might be delivered by a third party hence the electric van leases had not been renewed.
- That the majority of trips were made within the Royal Borough and that it made more sense to Members to charge an electric car up rather than using a petrol car.
- That the booking facilities for the pool cars would be moved towards keyless entry of the vehicles via a third party, Alphabet, which would allow staff to book the pool cars online via a new scheme called Alphacity. It was noted that the pool cars would be tracked allowing Alphabet to know where the pool cars were at any one time.
- It was noted that the unleaded Minis had been the only small vehicles available to the Council via this scheme at this time.
- That pool cars were available for Members to use.
- That going forward the use of the pool cars at weekends and in the evenings might be opened up to residents.
- Councillor Yong explained that in London residents were able to hire cars for an hour or two which she felt was a very useful and cost effective system.
- Councillor Ed Wilson explained that the Car Share Club scheme in London had designated parking spaces and that was something that could be looked at for the Royal Borough (particularly Windsor) in the future. It was noted that electric vehicles were available in the Car Share Club scheme in London.
- Success of the Staff Travel Plan would be measured by maximum usage of the pool cars but with a reduction in mileage overall.

The Chairman stated that he was appalled with what was being reported regarding the new pool car scheme as he felt it was going against the Borough policy to promote a greener environment (by the use of electric cars). After a short debate the Chairman of the Panel explained he understood the decision was not the responsibility of the Transport & Access Team Leader or the Panel, he agreed to ask for further information from the relevant Head of Service to understand the full details behind the discussion.

RESOLVED UNANIMOUSLEY: That further details be provided to show the usage of the pool cars and explain;

- The basis of and who had decided on the new pool car scheme.

- **Why the new pool car scheme had been sanctioned.**
- **The explanation about why the proposed scheme had not come to the Sustainability Panel before it had been agreed.**
- **Whether the new pool car scheme had been part of a Cabinet report.**
- **Confirmation that the reintroduction of electric cars as part of this new scheme would be looked into for the future.**
- **Whether a fleet plan existed and if so for it to be shared with the Panel.**

TOWN HALL BUILDING MANAGEMENT SYSTEM UPGRADE BUSINESS CASE

The Energy Reduction Manager, Michael Potter, referred Members to pages 11-18 of the agenda and explained that the report provided an overview and business case for the upgrade of the Town Hall building management system (BMS).

The Energy Reduction Manager highlighted the need to replace and upgrade the existing Town Hall building management system (BMS). It was noted that the BMS currently controlled the boiler, hot water cylinder and chiller systems and due to its age it could no longer be maintained or accessed by relevant staff. Members were informed that this lack of control meant that energy was not being properly controlled in the Town Hall.

Members were informed that some budgeting costs had been sought from external contractors to determine the extent of the project. It was noted that to upgrade the Town Hall building management system and connecting the air conditioning system to the building management system was estimated to cost £30k.

The Energy Reduction Manager explained that the contractors that had been contacted had stated that a 10-15% saving could be achieved by upgrading the building management system. It was noted that in gas terms this would equate to roughly £2.5k per annum. The Energy Reduction Manager went on to explain that further to this the connection of the air conditioning to the system should also yield some electrical savings.

In the ensuing discussion the following points were noted:

- The system was last upgraded in 2006 and that the Council's IT infrastructure no longer allowed the system to be controlled over the Council's servers, which meant adjustments could not be made.
- That the heating and cooling systems could theoretically be working at the same time.
- That the user interface for the BMS system would ideally control all of the Town Hall control panels from one access point.
- That since the Town Hall was refurbished, elements of the BMS system have been controlled separately and it was felt that it was critical to install a new system that would connect these elements up to ensure the building temperatures were appropriately regulated.

- That a software based system currently in place simply switched the heating on as programmed.
- That the Mechanical Engineer (Building Services) was now part of a shared service with Wokingham.
- That the Energy Reduction Manager would work with Building Services to put together a tender package.

The Chairman stated that he felt that the savings could be far in excess of those stated however the costs could be greater too.

The Chairman requested that the detailed BMS specification be sent to himself and the Vice-Chair once it was available.

RESOLVED UNANIMOUSLEY:

- i) That the upgrade of the Town Hall building management system (BMS) be approved and be funded from the Energy Initiatives capital budget.**
- ii) That delegation be given to the Head of Governance, Partnerships, Performance & Policy (David Scott), in consultation with the Chairman of the Sustainability Panel and the Lead Member for Sustainability, to review the outcome of the tender process and agree a variance if it came to more than the estimated cost of £30k.**

UPDATE FROM THE ENERGY REDUCTION MANAGER

The Energy Reduction Manager referred Members to pages 19-28 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.

The key areas covered were noted as follows:

- Energy Performance Target
- Building LED project
- Collective Energy Switching
- Town Hall Solar Display
- Street lighting LED project
- Work planned over the next period

In the ensuing discussion, the following points were noted:

- Energy Performance target
 - A 5.1% reduction in energy consumption was currently being achieved in the 2015/16 financial year and an 8.8% reduction over the whole year compared to the baseline was expected.
 - Leisure buildings, schools and street lighting were not included in the energy consumption figures.
 - The two buildings located opposite the Town Hall that had since been demolished were no longer included in the energy consumption figures.

Building LED project

- That the Building LED project was progressing and Hines Meadow Car Park was now almost complete.
- The car park was currently showing a 59% reduction on last year's energy consumption – the further shortfall was being investigated and if possible would be rectified. It was noted that a possibility of an overlap on circuits could be to blame.
- Windsor Library, Guildhall, the Coach Park and the Maidenhead Projects Centre were now all completed.
- Although the scheme was currently two / three weeks behind schedule the contractors were still seeking to complete the project on time.

Collective Energy Switching

- The Procurement and Communications teams had provided feedback on the scheme and had advised that the implementation of a scheme locally would be viable.
- That further media advertising could be carried out via the staff bulletin, website, twitter, Facebook, Advantage Card and the Around the Royal Borough newsletter.
- It had also been suggested that parish councils be asked to further publicise the scheme within their parish areas.
- That further media advertising at a cost to the Council was not looking to be pursued other than possibility of sending out a flier with the Around the Royal Borough newsletter which was estimated could cost between £4.5k - £6k depending on the nature of the flyer.
- That agreeing a partner for the scheme would be the next stage of the project. Once contracts have been signed then branding etc would be agreed with the Sustainability Panel.

Town Hall Solar Display

- That a review of the solar panel public displays market had been carried out and there were two different display types currently available.
- The Chairman stated that he did not like either of the display screen options in the report and requested further options be made available to the Panel.

Street lighting LED project

- That the Council was embarking on a LED replacement programme of the street lighting estate. It was noted that the street lighting project had now gone out to tender with a view to completing the exercise by the end of the current financial year.
- That the project installation programme, scheduled to start mid 2016, would be presented to the Panel.
- That work planned over the next period included:
 - Ensuring the LED lighting project was delivered to programme.
 - Arranging site visits for Adopt a building.
 - Creating a water consumption baseline.

The Panel requested the following:

- ❖ An update on Collective Energy Switching be given at a future meeting.
- ❖ A case study (Collective Energy Switching) be provided and an explanation of what the targets for success were felt to be.
- ❖ That the display screen in Reception should show multiple savings (car park usage savings, solar panel savings, etc) and be a permanent display.
- ❖ That rolling slides that could be updated on a weekly basis could be an option for the display screen in Reception.
- ❖ That the display screen in Reception should show the savings made in monetary terms too.

- ❖ That further display screen options were to be provided to the Panel.
- ❖ That the people who monitored street lights be invited to a future meeting to explain the amount of light (duration) being used and the cost being charged to the Council.

UNANIMOUSLY AGREED;

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

The Chairman congratulated the Energy Reduction Manager on the work he had done with regard to LED lighting.

DATE OF FUTURE MEETINGS

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

- Monday 14 March 2016
- Monday 16 May 2016

The Panel requested the following be brought to a future meeting:

- ❖ That the results (take up) of the food waste campaign be brought to the next meeting.
- ❖ That the London City Corporation who used solar panels in public bins to monitor how full bins be looked into.

The meeting, which began at 7.30 pm, finished at 9.00 pm

CHAIRMAN.....

DATE.....

Report for: ACTION



Contains Confidential or Exempt Information	NO – PART I
Title	Maidenhead District Energy Network
Responsible Officer(s)	Russell O'Keefe, Strategic Director Corporate and Community Services
Contact officer, job title and phone number	David Scott, Head of Governance, Partnerships, Performance and Policy. Tel: 01628 79 6748
Member reporting	Cllr Coppinger, Lead Member for Sustainability
For Consideration By	Sustainability Panel
Date to be Considered	14 th March 2016
Implementation Date if Not Called In	Immediately
Affected Wards	n/a

REPORT SUMMARY

1. This report provides information about decentralised energy and how the Council could potentially benefit from a district energy network in Maidenhead.
2. This report recommends that members provide comment on the proposed scheme and if there is support in principle for the scheme it recommends an initial assessment is carried out by specialist consultants to determine its viability.
3. This recommendation is being made to ensure members have the relevant background information, and are interested in the scheme in principle, before any decisions are made on whether further investigations should be carried out.

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. Should members agree that initial investigations are carried out then this will help the Council to better understand the merits of a district energy scheme in Maidenhead. If the scheme is found, by the initial investigations, to be viable and it is implemented then this may lead to reduced energy costs for the Council and it may lead to a commercial enterprise. The scheme would therefore help to improve the Borough's value for	March 2017

<p>money for its residents. Since district energy schemes are more efficient and can provide more security of supply and flexibility than traditional grid based systems this scheme will also help to improve the sustainability of the networked buildings and therefore Maidenhead town centre.</p>	
--	--

1. DETAILS OF RECOMMENDATIONS

RECOMMENDED: that the members of the Panel provide comment on the district energy network proposal and determine whether there is support in principle for the scheme. If there is support in principle and the panel is in agreement that the scheme should be investigated further, an initial high level assessment will be carried out by a specialist consultancy to determine the viability of a district energy network in Maidenhead at a cost of £6k.

2. REASON FOR RECOMMENDATION(S) AND OPTIONS CONSIDERED

- 2.1 The Royal Borough is currently regenerating Maidenhead town centre which means that many new buildings are being built in close proximity to one another. All of these buildings will require energy in order to maintain their required comfort levels. The energy provided to the buildings could come from traditional grid supplies but as an alternative the energy could come from a local ‘decentralised’ energy plant. The energy plant could deliver energy in the form of heating, cooling and electricity to buildings that are connected to the Maidenhead network. There are a number of potential reasons for constructing an energy network such as this, these include: generation of low carbon energy, reduced energy prices, improved energy security and income generation.
- 2.2 Should the Sustainability Panel be supportive of the proposal the first step in taking the scheme forward would be to carry out an initial assessment to assess the scheme viability. This assessment would be a high level appraisal only, with the principal purpose of assessing whether the authority should commission more detailed technical and economic feasibility studies.

Option	Comments
(a) Members of the panel consider the district energy network scheme and decide to not investigate the scheme further.	(a) By not investigating the decentralised energy scheme, the Council may potentially be missing a positive and commercially viable enterprise.
(b) Members of the panel consider the district energy network scheme and decide that an initial assessment for a district energy network in Maidenhead should be conducted. Recommended	(b) The initial assessment may prove that the scheme is viable. This could potentially mean in the future, if the scheme was to proceed, that not only the Council successfully regenerated Maidenhead but it also ensured efficient local large scale energy supply to a number of Maidenhead buildings. This

Option	Comments
	project could help the Council to improve the sustainability of Maidenhead, reduce its energy bills and could potentially lead to a commercial enterprise.

3. KEY IMPLICATIONS

Defined Outcomes	Unmet	Met	Exceeded	Significantly Exceeded	Date they should be delivered by
Subject to member support of the district energy network proposal, conduct an initial high level assessment of a network in Maidenhead	No work carried out	Assessment carried out by 31/07/16	Assessment carried out by 30/06/16	Assessment carried out by 31/05/16	31 st July 2016

4. FINANCIAL DETAILS

4.1 Financial impact on the budget

Capital	2015/16	2016/17	2017/18
	Capital £'000	Capital £'000	Capital £'000
Pre-approved	£0	£6	£0

An initial assessment conducted by an energy consultancy would require an estimated budget of £6000 (based upon a quotation provided). This can be funded from the approved Energy Savings Initiatives capital budget for 2016/17 currently held within the Performance team.

5. LEGAL IMPLICATIONS

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

6. VALUE FOR MONEY

- 6.1 This report, which recommends an initial assessment is conducted, may lead, if the project is found to be viable, to the Council reducing its expenditure on energy and potentially creating a commercial enterprise.

7. SUSTAINABILITY IMPACT APPRAISAL

- 7.1 Decentralised energy is considered a more sustainable model for energy generation due to its high efficiency when compared to traditional centralised power station generation and distribution.

8. RISK MANAGEMENT

Risks	Uncontrolled Risk	Controls	Controlled Risk
If an Initial assessment is conducted and it does not provide any further information to suggest that the scheme is viable or not.	Medium	Council officers provide as much information as possible to allow a full assessment to be carried out.	Low

9. LINKS TO STRATEGIC OBJECTIVES

- 9.1 The district energy scheme 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

- Developing Our systems and Structures

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 report contains content relating to the generation of usable energy to a number of buildings in Maidenhead including potentially the Town Hall and Maidenhead Library.

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
31/07/2016	Initial assessment completed

16. APPENDICES

16.1 There are no appendices.

17. BACKGROUND INFORMATION

What is decentralised energy?

17.1 Decentralised energy is where energy is converted into useful forms of energy such as electricity, heat and cooled water on a local scale. It is therefore the opposite of electricity generated through a power station which is classed as centralised energy generation.

What is a district energy network?

17.2 One form of decentralised energy can be achieved using a technology called combined heat and power (CHP) which generates electricity and heat usually from natural gas. Cooled water for cooling applications can also be generated when the CHP is coupled with an absorption chiller. The inclusion of cooling capacity with heating and electrical capacity is called trigeneration.

17.3 CHP units are already being used in the borough, for example at both Magnet and Windsor leisure centres there are CHP units, so the utilisation of CHP is nothing new. This project, however, seeks to go further than individual buildings using their own CHP units by creating a network of buildings connected to a CHP unit via private wires and pipes. This would create a district energy network. Whilst the

majority of generation would likely come from a CHP unit, the network does not necessarily have to be purely fed by one. The network can also encompass other generation technologies that feed into the network to help balance the supply and demand.

What are the benefits of a district energy network?

17.4 District energy networks offer a number of direct benefits over centralised generation:

- They enable the efficient transportation and use of heat, cooling and electricity for a wide variety of users
- They allow a broad range of energy generation technologies to work together to meet demands
- They enable fuel flexibility through different generation sources
- They help to efficiently manage supply and demand of energy
- They lower costs of energy generation
- They increase fuel efficiency through the use of CHP
- They reduce labour and maintenance cost as compared to individual systems in each building e.g. boilers

17.5 These benefits in turn deliver these further beneficial outcomes:

- Significant reduction in carbon emissions through the optimisation of heat supply
- Improved security of supply for the energy network.

Why should the Royal Borough construct a district energy network and why now?

17.6 The Royal Borough of Windsor and Maidenhead is a pioneering authority in many respects. The most recent pioneering project in the energy field alone was the implementation of an energy performance contract under the RE:FIT programme. The authority was the first in the country outside London to work on the scheme. Constructing a district energy network in the centre of Maidenhead, which would be the first of its kind in Berkshire, could provide another pioneering project that the authority could be very proud of. The authority would be constructing an efficient energy network for the future which would help improve the sustainability of the town.

17.7 With the huge development plans for Maidenhead town centre comes a great opportunity to include a district energy network as part of the wider regeneration opportunities. With so many new buildings being built it presents a unique chance to build in an energy network as part of the construction process of these buildings. The close proximity of the new buildings in the centre of Maidenhead also ensures that the appropriate connections would be viable. Of course there are also many existing buildings that will remain in the town centre and some of these buildings could also be linked to the network. This would deliver more efficient and cost effective energy to these buildings, for example the Town Hall.

17.8 National grid is currently very concerned about supply margins in the electrical grid. This is because many power stations are being closed down and the gap between what they can supply and what energy consumers require is closing. Schemes are already in place for decentralised generators to provide capacity in times of need as well as schemes for the end user to reduce demand at peak

times to allow the network to appropriately balance itself. Local generation capacity would allow Maidenhead to provide capacity to the grid at times of need and be reimbursed for this. Furthermore, following this demand for extra capacity on the grid the Department for Energy and Climate Change (DECC) also offer financial assistance with progressing heat network schemes to implementation. In the recent autumn budget government showed its commitment and has pledged £300m towards heat networks over the next 5 years.

Initial assessment

- 17.9 An initial assessment would be needed to initially understand whether the project is feasible as a starting point. The assessment would be a high level appraisal only, with the principal purpose of assessing whether the authority should commission more detailed technical and economic feasibility studies.
- 17.10 This assessment would focus on major development sites, applying feasibility criteria to test their suitability for supply by district energy. In parallel to this, existing building stock in close proximity to anticipated development sites will also be appraised for their potential to connect to a decentralised energy network. The assessment would primarily be focusing on heating and cooling demand and mapping where the energy demand is around Maidenhead. Following the assessment, recommendations based on the scheme viability would be presented to allow further discussion and a decision on the next steps.

Funding

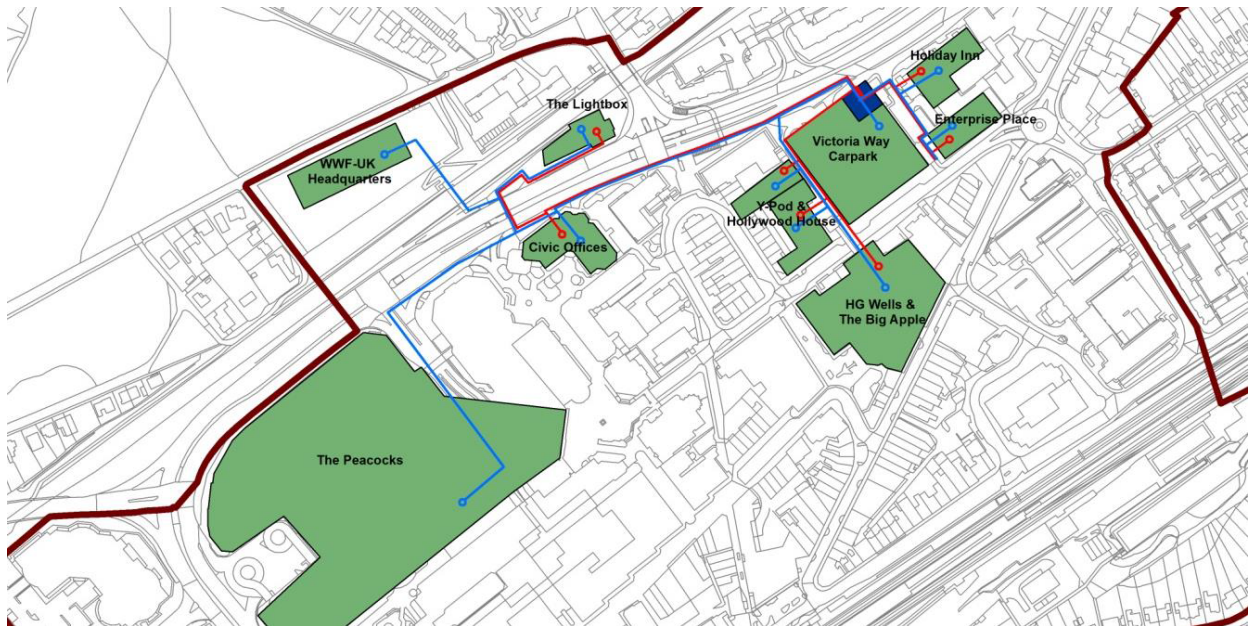
- 17.11 A scheme such as a district heating network is a large scale project that would require appropriate levels of funding. There are a number of stages of the scheme that would require consideration:
1. Initial assessment
 2. Specification, tender, master mapping, full feasibility and project development
 3. Installation
 4. Ongoing running costs
- 17.12 Step 1 is the step currently being proposed.
- 17.13 Step 2 can currently be carried out using match funding from DECCs Heat Network Delivery Unit (HNDU) – it is currently unclear how the recent government pledge of £300m will affect this funding.
- 17.14 At step 3 there are a number of possibilities for funding:
1. Authority self finance
 2. Private energy services company finances scheme
 3. 3rd party finance
- 17.15 Step 4 costs would be determined by the contracting model with the service provider.

Case Study – Woking Borough Council

- 17.16 Woking Borough Council formed the Thameswey Group of companies in 1999. The group currently has a turnover of roughly £25m and owns assets worth over £70m. Part of the group are two energy service companies (ESCOs) that generate and distribute low and zero carbon energy to public, commercial and private

customers. One of these companies is based in Woking and the other in Milton Keynes.

17.17 In May 2000, Woking Borough Council set up its first Energy Services Company (ESCO), Thamesway Energy Ltd, to build and operate a gas CHP energy station in Woking town centre. The ESCO now includes an energy infrastructure of a 1.6MWe gas-fired Combined Cooling, Heat and Power plant in Woking town centre and nearly 2MWp of Solar PV. This was the first district trigeneration network built in the UK, providing low carbon distributed cooling, heating and electricity networks serving a conference venue, large hotel, council offices, museum and gallery, entertainments complex and over 120 private apartments. Below is a schematic of the Woking network.



17.18 In 2005, a second ESCO was set up by the Thamesway group in Milton Keynes. This ESCO runs and distributes energy from a 6.4MWe gas-fired CHP and provides heat and electricity in the centre of Milton Keynes to over 1100 business and domestic customers. This network currently has a radius of 1.5km and expansion of the network is planned to serve new and existing developments in the area.

18. CONSULTATION (MANDATORY)

Name of consultee	Post held and Department	Date sent	Date received	See comments in paragraph:
Internal				
David Scott	Head of Governance, Partnerships, Performance and Policy	24/02/16	25/02/16	Throughout

Name of consultee	Post held and Department	Date sent	Date received	See comments in paragraph:
External				

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

This page is intentionally left blank

Report for: ACTION



Contains Confidential or Exempt Information	NO – PART I
Title	Energy Reduction Manager Update
Responsible Officer(s)	Russell O’Keefe, Strategic Director Corporate and Community Services.
Contact officer, job title and phone number	David Scott, Head of Governance, Partnerships, Performance and Policy. Tel: 01628 79 6748
Member reporting	Cllr Coppinger, Lead Member for Sustainability
For Consideration By	Sustainability Panel
Date to be Considered	14 th March 2016
Implementation Date if Not Called In	Immediately
Affected Wards	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 update report recommends that Members note progress, comment on the proposed work plan until the next Sustainability Panel, decide if a waterless urinal supplier should attend a future meeting and approve the sustainability strategy action plan 2016/17. It is also recommended that the existing large display screen in the foyer is used to display a Sustainability slideshow.
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 utility and waste costs, the Borough is providing better value for money to its residents.	March 2016

1. DETAILS OF RECOMMENDATIONS

RECOMMENDATION: the panel are asked to note the progress made, decide if they want a waterless urinal supplier to attend a future meeting and

comment on the proposed work plan over the next period as detailed in paragraph 17.24.

RECOMMENDATION: that the sustainability strategy annual action plan 2016/17 is approved subject to the confirmation of the waste target. Further details can be found in paragraph 17.8 – 17.10 and appendix 2.

RECOMMENDATION: that the existing large public display screen in the foyer is used to display a slideshow showing the savings and positive work of the Sustainability Panel. Further details can be found in paragraphs 17.15 – 17.17.

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:

- 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 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.

Option	Comments
(a) The Council does not work towards the sustainability strategy.	(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. Recommended	(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 Sustainability Panel approves the 2016/17 sustainability strategy annual action plan subject	(c) Failing to work according to the 2016/17 action plan could mean the Council would not meet the targets of the sustainability strategy 2014-2018. The work of

Option	Comments
to confirmation of the waste target. Recommended	the strategy is vital in ensuring value for money for residents through reductions in utility expenditure whilst also improving the Council's sustainability.
(d) The Sustainability Panel approves the use of the large display screen in the Town Hall foyer for presenting the Sustainability slides. Recommended	(d) Use of the existing large display screen is recommended since the screen is large and is in a good position to present information to the public. Using this screen it will be possible to present any information that is required. The solar display screens investigated as an alternative did not allow information to be presented an appropriate format.

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 st March 2016

4. FINANCIAL DETAILS

Financial impact on the budget

4.1 None

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

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 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 – Site performance tables – January 2016
Appendix 2 - Sustainability Strategy Action Plan 2016/17

17. BACKGROUND INFORMATION

Stark Management Reporting

17.1 A company called Stark currently collate all of the Council's corporate half hourly energy consumption data. This includes energy consumption data from the Council's mandatory half hourly meters, non half hourly smart meters and automatic meter reading (AMR) gas meters.

17.2 The half hourly data collated from the smart meters and mandatory half hourly meters can be reported in various formats. The data can be shown over different reporting periods: daily, weekly, monthly and yearly. Stark can produce many different report formats using the data over these reporting periods - some of which allow more detailed analysis and some provide overview management information.

- 17.3 The Sustainability Panel previously requested that management information is brought to the panel using the information collated in Stark. The best report format for this purpose is the league table which sums the half hourly data for the period in question and ranks the site according to the site energy intensity for the period. Energy intensity is measured by comparing the total energy consumed in the period to the internal floor area of the site (kWh/ m²). This figure then provides a comparison between sites, however, each site must be compared taking into account what the building is used for. Sites with similar usage patterns and equipment can be directly compared for efficiency whilst the efficiency of dissimilar sites can not be. Of course an idea of the overall levels of energy consumption and intensity can be deduced from the information. It should be noted that in most cases the energy consumption has been compared to site floor area, however, the only exception to this rule is car parks. At these sites, which do not have internal areas, the number of parking spaces is compared to the energy consumption.
- 17.4 The tables shown in appendix 1 show the worst performing gas and electric sites when the utilities are considered separately and together as a total energy consumption. The figures are based on the energy intensities during January 2016.
- 17.5 The highest intensity buildings for electricity are the two multi-storey car parks – Hines Meadow and Stafferton Way. As discussed in paragraph 17.3 these sites use a different energy intensity measure and should not be compared to the other sites. However, during January both Hines Meadow and Stafferton Way sites performed in a similar fashion. It is interesting to note that prior to the LED upgrade project Hines Meadow had an energy intensity of over 90 kWh/ space and so now it is performing in line with the other multi-storey car parks at 44 kWh/space. From the other 8 sites listed, the following sites are cause for concern: Riverstreet Public Convenience, Eton Library, Oakley Green Cemetery. These sites do not have gas and so any heating – space or water heating will also come from their electrical usage. These sites do have a higher energy intensity than Maidenhead Library though which is also fully electrically heated. Using the half hourly data it is possible to view the daily consumption profile of these sites which shows high consumption during out of operational hours compared to operational hours at Eton Library and Oakley Green Cemetery. This appears to be due to electrical heating at these sites being left on out of hours. Ways to better control these sites are currently being investigated. At Eton Library the library service are proposing a replacement electrical heating system that will be more efficient and appropriately controlled. Further investigation is happening to determine why Riverstreet public convenience has such a high energy intensity.
- 17.6 Looking at the top 10 worst performing sites for gas intensity there are a couple of smaller sites at the top – Manor Youth Centre and Braywick Nature Centre. Looking at the daily consumption profiles it is clear that the boiler controls are no longer working correctly at these sites. Oakbridge day centre is the 3rd worst. This is likely to do with the higher temperatures required at the site since the boiler usage patterns look appropriate. The out of hours usage at Manor Youth Centre has now been resolved following further investigations.
- 17.7 It is also possible to combine gas and electric consumption to gain an overall impression of how the sites are performing. Tinkers Lane Depot is top of the list as

the Council's most energy intensive site. This is due to the 24 hr CCTV office, long working hours and the presence of servers on the site. Riverstreet Public Convenience and Eton Library are positioned second and third on the energy intensity list purely due to their high electrical usage. These two sites seem out of place above 4 Marlow Road and the Town Hall which should be more intensive. Manor Youth Centre is also higher up the table than should be expected sitting between 4 Marlow Road and the Town Hall. This is due to its higher than expected usage of gas as discussed in paragraph 17.6.

Sustainability Strategy Action Plan 2016/17

- 17.8 The proposed sustainability strategy action plan for the 2016/17 year can be found in appendix 2. It is recommended that this action plan is adopted in order for the Council to meet its strategy targets and aims.
- 17.9 Some of the key actions for next year include: the interim target for energy reduction of 11% compared to the baseline year, the roll out of the LED streetlighting programme, replacement of the Town Hall building management system (BMS) and the first of the water reduction works. There are also other investigative actions to determine whether projects are viable or how they will be carried out, such as further LED works and a staff sustainability awareness scheme, which may lead to future projects.
- 17.10 The Waste Strategy Manager has asked that the waste target for recycling, reuse and composting is adjusted to include waste used for energy recovery. This target is now reported corporately and therefore the targets should be aligned. The target for 2016/17 will be confirmed as soon as possible.

Solar Car Parks

- 17.11 As an option for future solar panel installations an initial investigation has been carried out to determine whether installing solar panel canopies in car parks would be feasible.
- 17.12 The Council is responsible for both multi-storey car parks as well as surface car parks. Many of these car parks have large numbers of parking spaces which could provide a large open area for a solar installation. A company was asked to provide an estimated financial model for installing solar canopies on multi-storey car parks and surface mounted car parks. It was hoped that the financials models would provide evidence to determine whether further investigations should be carried out.
- 17.13 It was found that every parking space allows a canopy of 2.5kW of solar capacity. This means the smaller surface mounted car parks could include solar installations of around 200kW. The larger car parks with over 200 spaces could therefore have an installation of roughly 500kW. It was found that it is cheaper to install in a surface mounted car park by about 50p/Watt. This is because it is easier to form the canopy foundations at surface level and there is less wind loading to take into account. However, the Borough's surface mounted car parks are much more likely to have shading problems than the multi-storey car parks and they often do not have any day time power consumption that can use the generated power. Offsetting grid supplied power to a building will help the business case since the cost of purchasing power is more than what you can sell it for.

17.14 At current solar panel prices, feed in tariff levels and electric prices it has been determined that payback periods of over 15 years may be achievable. This would be subject to easy installation which is unlikely in the case of canopies on top of a multi-storey car park. If solar panel prices reduce further then this format of solar generation may become more viable in the future.

Town Hall Solar Display

17.15 A revised proposal for the Town Hall Solar display has been reconsidered following the last Sustainability Panel discussions on the matter. The key messages taken from the Panel were: the screen needed to be dedicated, it needs to show monetary savings and that savings from other projects the Panel are working on should also be displayed.

17.16 Taking into consideration the points made by the Panel it is recommended that the large screen found in the foyer is used to show a slide show showing the savings and positive work that the Panel is carrying out.

17.17 The ICT team have agreed to provide a dedicated laptop to link up with the large display screen in the foyer. This laptop will be able to display any information that is uploaded to it as a slideshow. The Energy Reduction Manager will become the administrator for the laptop and therefore will be responsible for the content that is being shown. Any particular Council campaigns that come up during the year will be added to the slideshow and presented alongside the current sustainability slides. The slides are currently in draft form and will be presented on the screen very shortly.

Water baseline

17.18 Over the last year the information that the Council holds regarding its water estate has been checked and where necessary amendments and additions have been carried out in SystemsLink (the Council's energy and water management software) to bring it up to date. Following this exercise, the Council has been obtaining the water supplier billing information covering the period from April 2013 to present. This is so a baseline can be formed for the 2013/14 year which can then be compared to the water consumption for the following years. It is important that the baseline is as accurate as possible since the future water reduction target of 3% will be based on the savings made against this baseline. Water consumption information will be presented at the next Sustainability Panel.

Waterless Urinals

17.19 Initial investigations are currently ongoing to determine whether the Council could adopt waterless urinals in gentlemen's toilets. Waterless urinals are now a well established technology which has been adopted by many well known private companies on the high street and beyond.

17.20 Waterless urinals do not need to be flushed using water and instead the bowl requires cleaning using various products. To stop smells escaping in the toilet area the urinals have a trap mechanism at the bottom of the unit. This mechanism varies by manufacturer and this can also affect the way in which the urinal is cleaned. According to a study of washrooms, an average urinal uses roughly 100m³ of water per annum. Usage of certain controls can reduce this figure down to about 50m³. This means each urinal uses £100-£200 of water per annum which could be saved by implementing waterless urinals.

17.21 There are three key types of waterless urinals; ones that use microbiological action to break down odours in the urinal u-bend, ones that use an oil based barrier in the trap to block odours and there are also urinals that use a trap system with an in-built valve to block odours. The cleaning products used with each system does vary and it is necessary to use the correct product otherwise it may affect the operation of the urinal.

17.22 The business case for installing waterless urinals is based around the saving that can be made on the water bills taking into account the ongoing maintenance and cleaning costs. The amount of water saving will of course always remain the same at any particular site when comparing different manufacturers products. However, the way that the urinals are cleaned and maintained does vary as does the cost of the urinal itself. It will therefore be important to understand all replacement urinal costs over a number of years.

17.23 The Energy Reduction Manager has spoken with a supplier who is currently putting together a business case for review. If members wish to find out more from the supplier at a future Sustainability Panel then the supplier’s salesman could be asked to attend.

Work planned over the next period until the next Sustainability Panel

17.24 The work for the next period includes:

- Ensuring the LED lighting project is fully completed.
- Completing the water consumption baseline.

18. CONSULTATION (MANDATORY)

Name of consultee	Post held and Department	Date sent	Date received	See comments in paragraph:
Internal				
David Scott	Head of Governance, Partnerships, Performance and Policy	24/02/16	25/02/16	Throughout
External				

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

This page is intentionally left blank

Top 10 high energy intensity sites

Number	Site Name	Utility	Reporting Period	Total Floor Area m ²	Total kWh	kWh / Total Floor Area m ²
1	Stafferton Way Car Park	Electricity	Jan-16	576	25557	44.37
2	Hines Meadow Car Park	Electricity	Jan-16	1314	57858	44.03
3	Public Convenience River Stre	Electricity	Jan-16	145	5690	39.24
4	Eton Library	Electricity	Jan-16	62	2412	38.9
5	Tinkers Lane Depot	Electricity	Jan-16	1142	33870	29.66
6	Oakley Green Cemetery	Electricity	Jan-16	115	2971	25.84
7	Maidenhead Library	Electricity	Jan-16	1878	38211	20.35
8	Town Hall	Electricity	Jan-16	5694	90109	15.83
9	4 Marlow Road	Electricity	Jan-16	1161	16991	14.64
10	Old Windsor Library	Electricity	Jan-16	64	935	14.61

Number	Site Name	Utility	Reporting Period	Total Floor Area m ²	Total kWh	kWh / Total Floor Area m ²
1	Manor Youth Centre	Gas	Jan-16	365	10598.27	29.04
2	Braywick Nature Centre	Gas	Jan-16	190	4915.41	25.87
3	Oakbridge Day Centre	Gas	Jan-16	720	17346.21	24.09
4	Pinkneys Green Y. and C. Centre	Gas	Jan-16	367	7707.09	21
5	Sunninghill Library	Gas	Jan-16	100	2077.08	20.77
6	4 Marlow Road	Gas	Jan-16	1161	21223.93	18.28
7	Tinkers Lane Depot	Gas	Jan-16	1142	20506.61	17.96
8	Windsor Library	Gas	Jan-16	763	13657.76	17.9
9	Cookham Library	Gas	Jan-16	341	6029.45	17.68
10	St Marys House	Gas	Jan-16	452	7809.12	17.27

Number	Site Name	Utility	Reporting Period	Total Floor Area m ²	Total kWh	kWh / Total Floor Area m ²
1	Tinkers Lane Depot	Total Energy	Jan-16	1142	54376.48	47.61
2	Public Convenience River Stre	Total Energy	Jan-16	145	5689.79	39.24
3	Eton Library	Total Energy	Jan-16	62	2412.04	38.9
4	4 Marlow Road	Total Energy	Jan-16	1161	38215.38	32.92
5	Manor Youth Centre	Total Energy	Jan-16	365	11982.75	32.83
6	Town Hall	Total Energy	Jan-16	5694	169407.67	29.75
7	Oakbridge Day Centre	Total Energy	Jan-16	720	20947.77	29.1
8	Braywick Nature Centre	Total Energy	Jan-16	190	5501.66	28.96
9	Sunninghill Library	Total Energy	Jan-16	100	2726.21	27.26
10	Oakley Green Cemetery	Total Energy	Jan-16	115	2971.1	25.84

This page is intentionally left blank

Appendix 2 - Sustainability Strategy Action Plan 2016/17

Code	Work theme	Action	Result	Responsibility	Target Completion Date	Report to Panel
E1	Energy Reduction in Council buildings	Reduce energy usage by 11% compared to 2013/14 baseline	11% energy reduction on 2013/14 baseline	Energy Reduction Manager	31/03/2017	Update to panel every second panel
E1	Energy Reduction in Council buildings	Tender and replace building mangement system at Maidenhead Town Hall.	Works tendered and work completed before next heating season.	Energy Reduction Manager	30/09/2016	Update to every panel until project complete
E1	Energy Reduction in Council buildings	Investigate any further LED lighting upgrades.	Project investigated and proposal brought to Sustainability Panel.	Energy Reduction Manager	31/03/2017	Sep-16
E2	Street lighting Energy Efficiency	Implement streetlighting LED upgrade programme.	LED replacement and savings plan agreed with contractor and implementation commenced by 31/08/16.	Contracts & Commissioning Service Lead	31/08/2016	
R1	Council Renewable Energy	Investigate potential for further solar installations on corporate buildings.	Potential installations financially modelled and presented to the Sustainability Panel.	Energy Reduction Manager	30/11/2016	Nov-16
S1	Council sustainability awareness	Investigate ways to educate staff on sustainability matters and propose scheme to Sustainability Panel.	Sustainability Awareness scheme presented to Sustainability Panel.	Energy Reduction Manager	31/03/2017	Jan-17
S2	Schools sustainability awareness	Investigate ways to help schools to become more sustainable with a focus on reducing energy consumption.	Proposals for schools energy scheme presented to Sustainability Panel.	Energy Reduction Manager	31/03/2017	Jul-16
W1/ W2	Borough wide recycling and use of waste	Percentage of household waste sent for reuse, recycling, energy recovery and composting	% target TBC	Head of Community Protection and Enforcement	31/03/2017	
WAT1	Water reduction in Council buildings	Use meter data to determine sites with high water usage and continous flow (where known). Act to reduce water consumption.	High water usage is highlighted and reduced at 1 site.	Energy Reduction Manager	31/03/2017	Mar-17

This page is intentionally left blank