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NOTICE OF MEETING

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SUSTAINABILITY PANEL

will meet on

THURSDAY, 8TH MARCH, 2018

At 7.00 pm

in the

COUNCIL CHAMBER - TOWN HALL, MAIDENHEAD,

TO: MEMBERS OF THE SUSTAINABILITY PANEL

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

SUBSTITUTE MEMBERS

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

Karen Shepherd – Service Lead Democratic Services - Issued: Wednesday 28 February 2018

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 **Wendy Binmore** 01628796251

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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 previous meeting.	7 - 12
4.	<u>OPEN FORUM</u> Opening remarks by the Chairman on the Panel's role.	
5.	<u>POOL VEHICLES / ELECTRIC VEHICLE CHARGING</u> By the Principal Commissioning Officer (Sue Fox).	Verbal Report
6.	<u>WASTE UPDATE</u> By the Waste Manager (Naomi Markham).	Verbal Report
7.	<u>ENERGY REDUCTION MANAGER UPDATE</u> By the Energy Reduction Manager (Michael Potter).	13 - 26
8.	<u>DATE OF FUTURE MEETINGS</u> The dates of future meetings are as follows (7.00pm start): 31 May 2018	

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MEMBERS' GUIDE TO DECLARING INTERESTS IN MEETINGS

Disclosure at Meetings

If a Member has not disclosed an interest in their Register of Interests, they **must make** the declaration of interest at the beginning of the meeting, or as soon as they are aware that they have a DPI or Prejudicial Interest. If a Member has already disclosed the interest in their Register of Interests they 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 the discussion or vote at a meeting.** The speaking time allocated for Members to make representations is at the discretion of the Chairman of the meeting. In order to avoid any accusations of taking part in the discussion or vote, after speaking, Members should move away from the panel table to a public area or, if they wish, leave the room. If the interest declared has not been entered on to a Members' Register of Interests, they must notify the Monitoring Officer in writing within the next 28 days following the meeting.

Disclosable Pecuniary Interests (DPIs) (relating to the Member or their partner) 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 licence 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.

Any Member who is unsure if their interest falls within any of the above legal definitions should seek advice from the Monitoring Officer in advance of the meeting.

A Member with a DPI should state in the meeting: ***'I declare a Disclosable Pecuniary Interest in item x because xxx. As soon as we come to that item, I will leave the room/ move to the public area for the entire duration of the discussion and not take part in the vote.'***

Or, if making representations on the item: ***'I declare a Disclosable Pecuniary Interest in item x because xxx. As soon as we come to that item, I will make representations, then I will leave the room/ move to the public area for the entire duration of the discussion and not take part in the vote.'***

Prejudicial Interests

Any interest which a reasonable, fair minded and informed member of the public would reasonably believe is so significant that it harms or impairs the Member's ability to judge the public interest in the item, i.e. a Member's decision making is influenced by their interest so that they are not able to impartially consider relevant issues.

A Member with a Prejudicial interest should state in the meeting: ***'I declare a Prejudicial Interest in item x because xxx. As soon as we come to that item, I will leave the room/ move to the public area for the entire duration of the discussion and not take part in the vote.'***

Or, if making representations in the item: ***'I declare a Prejudicial Interest in item x because xxx. As soon as we come to that item, I will make representations, then I will leave the room/ move to the public area for the entire duration of the discussion and not take part in the vote.'***

Personal interests

Any other connection or association which a member of the public may reasonably think may influence a Member when making a decision on council matters.

Members with a Personal Interest should state at the meeting: ***'I wish to declare a Personal Interest in item x because xxx'. As this is a Personal Interest only, I will take part in the discussion and vote on the matter.***

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Agenda Item 3

SUSTAINABILITY PANEL

TUESDAY, 30 JANUARY 2018

PRESENT: Councillors Marion Mills (Chairman), Nicola Pryer, Derek Sharp, Lynda Yong and Simon Werner.

Also present: Martin Fry.

Officers: Wendy Binmore, Michael Potter and Kevin Mist.

APOLOGIES FOR ABSENCE

Apologies for absence were received from Councillor Coppinger.

DECLARATIONS OF INTEREST

None.

MINUTES

RESOLVED UNANIMOUSLY: That the Part I minutes of the meeting held on the 18 September 2017 be approved subject to the following amendment:

That Mr Martin Fry be added to the record of attendance.

OPEN FORUM

The Chairman welcomed members of the public, one in particular that had requested to speak on the issue of plastic waste, and the overuse of plastic bottles polluting the oceans. As the Royal Borough was placed alongside the Thames which flowed into the sea, it was a good place to start trying to reduce the reliance on single use plastics which were often washed down stream and into the sea.

BRAYWICK LEISURE CENTRE SUSTAINABLE FEATURES

Kevin Mist, Communities Project Lead, introduced the item and stated the design team had been working together for 12 months and a planning application had been submitted. The application was waiting to go to Panel. The Communities Project Lead and his team had been working with Wates Construction under a framework agreement and they were benefiting from practical advice from other organisations that had built other leisure centres. He hoped the presentation would answer a lot of questions and reassure residents of the good quality of the project.

The main points of the presentation were as follows:

- Sustainability objectives:
 - To achieve a 75% reduction on utility costs over the current Magnet Centre
 - To provide a future facility which enabled amendments and modifications to the fabric as technology and use advanced

- To follow an approach that offers the best value to the Council and local rate payer with a life cycle costing approach to Capital and Operational Expenditure
- To provide a life cycle of at least 35 years.
- Site Location:
 - The site was located in the Green Belt within Braywick Park
 - The team had looked at the path of the sun to get the most use of daylight to keep energy costs reduced.
 - The location to be used was a former landfill site with interesting trees.
- Site Strategy:
 - Pedestrians had priorities in certain places
 - A holistic approach had been adopted
 - As part of the design, making elements work as hard as possible and making sure the scheme answered a brief on programme
 - Will be an extraordinary facility that was connected with the nature reserve and interconnected with a cycle path.
- Sustainable Travel:
 - Within walking distance to the Town Centre
 - Connected to the Green Way Cycle Path
 - Shuttle Bus to and from Town Centre
 - Increase in bus provision
 - 6 new electric vehicle charge points with the ability for more to be added at a later date
 - Cycling stands to be provided
- Sustainable Drainage:
 - Rainwater harvesting provision for grey water and irrigation
 - Sustainable Urban Drainage (SUDS) were to be used to ensure all surface water attenuates through the site.
 - Attenuation ponds and swale
- Ecology and Planting
 - Centre had been designed with careful consideration to the sites sensitive location
 - The development would enhance the ecological value through retention of high value trees and improved planting
 - Cemetery boundary to be reinforced creating a primary bat corridor
 - The central avenue would make the centre a hub for the park.
- Floor Plan:
 - There was to be a wet side and a dry side of the building as well as a street like area
 - There would be three elements that formed the construction
 - The building would feel generous in space and open within.
- Sun and Daylight:
 - The Planning application included PV provision
 - The winter garden skylight gave a parkland outside in feeling
 - Sun pipes provided natural light to the pool hall
 - Sun glare was controlled for balanced light
- Fabric First:
 - High level insulation and air tightness meant the building would retain heat, reducing the use of non-renewables
 - The design was highly planned and provided an excellent place for planting. There was no wasted space.
- Mechanical and Environment Approach:
 - Combined heat and power

- UV disinfection of pool water – minimise chemical input and increased water quality
- Air handling (73%-85% efficiencies) – efficient heat recovery
- LED lighting, occupancy sensors – minimises electrical requirement for lights
- BMS and smart management of facility (over 90% energy metered)
- Drinking fountains/water points at strategic locations – soft water showers to minimise cleaning required.
- Photovoltaic (PV) electricity generation
- Pool ventilation night set back (sleep mode when pool not in use)
- Inverter driven speed controls to fans and pumps
- High efficiency gas fired boilers
- Controls zoning, set point and time clock controls (tailored to match when building was being used)
- Low water usage appliances
- Rainwater harvesting for WC flushing

Mr Martin Fry stated the build looked challenging. Jason Crozier, Wates Construction stated the centre would be opening in January 2020, with a soft opening in spring 2019. The Communities Project Lead said the plans were uploaded onto the Borough's planning portal to be viewed. The team were working with users and clubs to develop the design and they would be going back to them for any final amendments. Andrew Stevens. Wates Construction confirmed that solar panels would be installed on the roof on the right hand side. Discussions were ongoing regarding how many panels would be installed due to the availability of funding. The roof would be slightly pitched. Richard Clayton, Architect for the project, stated the panels would not cover the whole roof due to the ventilation vents that were required.

The Chairman stated she liked the use of sun pipes to let light in. The architect of the project confirmed it was useful to have multiple points of light coming in as it reduced glare and made areas light while reducing energy costs. The Chairman stated it was reassuring to know all aspects of sustainability were being thoroughly looked into. Councillor Yong said the project sounded amazing and she was looking forward to seeing some of the features when they are introduced.

TOWN HALL BUILDING MANAGEMENT SYSTEM (BMS) UPGRADE

Simon from Aztec Controls gave a brief update on how the Town Hall BMS was progressing. The main points of his update included:

- The project was started by replacing various BMS control panels with Trend IQ4 type controls.
- The new system would be able to speak to any system in almost any language.
- The BMS could be used to monitor energy metering.
- Monitoring could take place from any PC within the RBWM network.
- The timer and temperatures could be adjusted.
- The system showed what the pumps were doing and would also show up any faults.
- The system calculated positions of valves, so the building was not always heated to the maximum which would save on energy and costs.
- Temperatures in different zones could be customised.
- Time scheduling was easily set and the system could schedule special events. Each zone could be individually programmed so that the whole building did not have to be running.

- The system would work based on outside and internal temperatures so it would heat to the correct temperature.

Simon confirmed that it was possible to set a one-time event for each area within the Town Hall as well as having the usual settings in place. The settings could be customised to individual needs to work for evening meetings when just one room needed to be heated. It would also be possible to add other buildings such as the Guildhall to the system and that would work across the ethernet. He added that door entry systems, alarm systems and vending machines could be added as the system used so many languages, it could convert them all into one language so systems could communicate with each other.

Councillor Yong enquired to find out if there could be an educational section in the new leisure centre which showed how the system worked as children would be fascinated with the technology. Simon responded that there could be a large dashboard screen in a public area which showed all the savings and how much energy had been made through the solar panels.

Councillor Sharp asked if the system would know if someone had moved from one room to the other and if there were any overwrite options for the settings. Simon confirmed that the new system took over the existing system so it would not really be able to do that. The system was split into four zones but there were no drawings that showed how mechanically the system was mapped out. In warmer weather, he would switch all but one zone off to map the system and would then be able to work out how the system could manage. Councillor Sharp suggested installing an override switch which would help to move zones as it was not always possible to programme in advance. Simon confirmed it was possible to do that. Temperatures were easily set by clicking on the floor map and then clicking on the individual temperature for the area required and typing the value wanted. Simon stated the air conditioning could also be controlled by zone and if the internet went down, the separate primary systems talked to each other on a separate network and each control panel had a touch screen that could change the heating etc. on the primary system. The Energy Manager said that as facilities set up rooms for meetings, they should be trained in working the system so that evening meetings could be programmed in..

At the end of the item, the Chairman agreed for a local resident to address the panel to talk about water fountains and reducing the amount of single use plastics, such as plastic bottles, in the borough.

The resident introduced herself as Laxmi and stated she lived in the Marlow Road area. She stated she walked through town and regularly saw a build-up of single use plastics, plastic bottles etc. that were disposed of around town; the build-up was worse at weekends and the Borough spent a lot on recycling.

Laxmi requested the Borough install a fountain on the High Street in Maidenhead near the Wilkinson's so that people did not have to buy bottled water; it would help the Council and tax payers save money on recycling costs. Laxmi said she had read a lot of data on reducing single use plastics and requested the reduction of the use of plastic cups at council meetings. She wished everyone could do something about it and she was happy to help..

Councillor Sharp stated the Borough should ask Thames Water to introduce a water fountain in the Borough. Councillor Werner said there were water fountains installed in

a nearby park and it was very well used. The Chairman suggested that fountains should be designed so that bottles could be refilled, not just so people could drink straight from them.

Councillor Sharp stated the Borough should be setting an example and paper cups used in meetings were a very acceptable recyclable option. The Energy Manager said the government's new 25 year environmental plan states that a network of refillable points is going to be formed all over the country and a number of cities had already started rolling out the scheme. The Energy Manager suggested the Maidenhead Town Manager could send details to local businesses to try and garner local support for a potential refill scheme. Councillor Sharp suggested getting residents groups to help the Council with the idea of having a refill network, to help persuade local businesses to allow people to refill their empty bottles with water for free.

- ❖ **Action** – The Chairman requested the Democratic Services Manager to ask the external caterer to provide paper cups instead of plastic cups.

ENERGY REDUCTION MANAGER UPDATE

The Energy Manager gave a brief update to the Panel. The main key points were:

- The Energy Manager's focus from April 2018 was on the Energy & Water Strategy 2018-2022
- The four topics within the strategy were listed in paragraph 11.2 on page 15 of the agenda pack
- Page 19 of the agenda pack showed a break-down of topics into actions which formed the backbone of the Strategy
- All work should fall within the actions of the Strategy.

The Chairman requested more information on the business scope supporting role. The Energy Manager confirmed that it included offering the Energy Switch to Save Scheme to businesses or offering energy efficiency advice.

The Chairman said she liked the site targets. The Energy Manager confirmed the work carried out to finish metering all premises the Borough had, had been completed. Councillor Sharp stated he wanted to see how well the Council was doing in terms of energy efficiency at every meeting. The Chairman requested up to date figures on the Council's solar panels be displayed on the screens in libraries. Councillor Sharp commented the screens should be linked with the new BMS system and should show real time figures. That would give residents an incentive to reduce energy at home. The Council should lead by example/ the Chairman stated the displays should be moved from reception to the library as the reception area of the Town Hall did not receive many visitors since most Council services had moved over to Maidenhead Library. The Energy Manager confirmed the solar panels were not linked to the BMS yet but he could look at arranging that. Councillor Sharp stated the new BMS should be publicised as the Energy Manager had done a very good job.

- ❖ **Action** – The Energy Manager to provide a monthly update on energy efficiency of Council buildings at every meeting.

The Energy Manager gave Members a brief update on the BMS and explained that the system was up and running and he was now working through a snagging list. The BMS had picked up faults which were being fixed. Further projects had been identified

through BMS such as work on the chiller and upgrading the pumps. He was looking at putting sub metering onto the BMS for monitoring purposes. He added that the LED lighting project had been completed within the Town Hall.

Councillor Sharp stated every time the Borough changed a street light over to LED, that should reduce the electric bill. Therefore, he wanted to know how much the electricity bill had been reduced by. He added that residents should be able to see how much energy the Council is saving. The Energy Manager confirmed that residents could see the half hourly energy consumption online.

The Energy Manager gave a brief update on the Energy Switch to Save Scheme next and explained that he had received the highest number of registrants overall and switchers expected to save up to £9,000 per year collectively. An estimated £20,000 had been saved for residents since the scheme had started.

Councillor Sharp stated the savings and the scheme should be well publicised. The Energy Manager confirmed that he would be publicising the scheme more through the Around the Royal Borough publication. Councillor Yong stated Radian Housing were trying to run a similar scheme so she had told them about the Switch to Save Scheme the Council had been running. Radian had huge housing stock with some less well-off residents; the Council could help with switching those residents and that would help the most vulnerable people with saving money on their energy costs. The energy Manager confirmed he would make contact with Radian Housing to see if there was any way of helping their residents. The Energy Manager added that he was proposing the next scheme in October 2018 to allow enough time to build up interest in the scheme.

The Panel noted that the Energy Manager had delayed the School Energy Saving Competition till early summer 2018. He had contacted schools and was awaiting responses; he was hoping to get enough schools to run the competition.

The Panel noted the work programme which was listed in paragraph 11.18 of the agenda pack. The Chairman stated she would like an update at the next meeting on the performance of the volumisers being installed on the ground floor of the Town Hall to help reduce water consumption, at the next meeting.

DATE OF FUTURE MEETINGS

The Panel noted the next meeting of the Sustainability Panel was due to be held on 8 March 2018.

The meeting, which began at 7.00 pm, finished at 8.55 pm

CHAIRMAN.....

DATE.....

Title: Energy Reduction Manager Update
Contains Confidential or Exempt Information?: <i>NO - Part I</i>
Member reporting: Councillor Coppinger, Lead Member for Sustainability
Meeting and Date: Sustainability Panel - 8 March 2018
Responsible Officer(s): Andy Jeffs, Executive Director David Scott, Head of Communities, Enforcement & Partnerships
Wards affected: All

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REPORT SUMMARY

1. This report provides an overview of the progress being made to deliver the Council's energy and water reduction strategy.
2. This update report recommends that members note progress and comment on the proposed work plan for the next period. It provides an update on energy data monitoring, streetlighting performance, the new energy and water strategy, the energy and water baseline period and the tap volumiser project. It is recommended that the panel notes the progress made, comments on the proposed work plan, notes and provides comment on the 2018/19 energy and water strategy action plan and approves the inclusion of Optalis and Action for Children sites in the 2017/18 energy and water baselines.
3. Recommendations are being made because it is important that Members provide comment and direction on the work being carried out and that the sustainability strategy targets are met.

1. DETAILS OF RECOMMENDATION(S)

RECOMMENDATION: That the Sustainability Panel notes the report, the progress made and comments on the proposed work plan over the next period as detailed in paragraph 11.21.

RECOMMENDATION: That the Sustainability Panel notes the proposed 2018/19 energy and water strategy action plan and provides comment.

RECOMMENDATION: That the Sustainability Panel approves the inclusion of Optalis and Action for Children leased Council buildings in the energy baseline.

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

- 2.1 The Council is currently working towards a four year Sustainability Strategy running from April 2014 to March 2018. The strategy focuses on 6 workstreams including: Sustainability, Energy, Water, Waste, Transport and Renewable Generation. The strategy has three key targets over the four year period which are:
1. Reduce energy use in the Council building estate by 15% in 2017/18 compared to a 2013/2014 baseline.
 2. Reduce water usage in the Council's corporate office buildings by 3% in 2017/18 compared to a 2013/2014 baseline.
 3. Recycling rates increased to 55% in 2017/18.
- 2.2 Each year an action plan is drawn up to enable the Council to meet these targets as well as other goals presented in the strategy documents. This update provides a progress report for the energy workstream.
- 2.3 After the first three years of the strategy the 2013/2014 energy baseline has been reduced by 15%. This equates to the Council avoiding just over £300,000 of energy costs over these three years.

2.4 **Table 1: Report options**

Option	Comments
(a) The Council does not work towards the sustainability strategy. This is not recommended	(a) Failing to work towards the sustainability strategy would mean the Council would not be able to meet its legislative commitments, would not be able to continually drive down energy costs and therefore would not be offering value for money for its residents.
(b) The Council works according to the current and any future sustainability strategy. This is the 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. (Para 2.3)
(c) The Sustainability Panel notes the energy and water action plan 2018/19 and provides comment. This is the recommended option	(c) Consultation of the Sustainability Panel will ensure that the desired actions are put in the action plan.
(d) That Optalis and Action for Children sites are included in the energy baseline for the new energy and water strategy 2018-2022. This is the recommended option	(d) These leased sites remain on the Council's contracts and are being managed by the Council. The energy bills are indirectly paid by the Council. It follows that they should remain on the baseline even though the users are not directly employed by the Council.

3. KEY IMPLICATIONS

3.1 Table 2: Target outcome following report

Outcome	Unmet	Met	Exceeded	Significantly Exceeded	Date of delivery
Overall reduction of annual gas and electricity consumption in Council buildings in 2017/18 compared to the 2013/14 baseline.	<15%	15-16%	16.1-17%	>17%	31 st March 2018
Reduction of water consumption in Council office buildings in 2017/18 compared to the 2016/17 baseline.	<3%	3.0-3.5%	3.6-4.0%	>4%	31 st March 2018

4. FINANCIAL DETAILS / VALUE FOR MONEY

4.1 No new funds are being sought through this paper.

5. LEGAL IMPLICATIONS

5.1 None.

6. RISK MANAGEMENT

6.1 Table 4: Risks for Sustainability Strategy actions.

Risks	Uncontrolled Risk	Controls	Controlled Risk
Targets for overall energy and water reduction are not met.	High	By providing updates at each panel meeting, Members are able to keep track of overall progress to ensure the Council meets its annual projected reductions and savings 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

7. POTENTIAL IMPACTS

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

7.2 No equality impact assessment has been carried out.

8. CONSULTATION

8.1 None

9. TIMETABLE FOR IMPLEMENTATION

9.1 Table 5: Timetable

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

10. APPENDICES

- 10.1 Appendix 1 – Electrical usage comparison for April to December 2017 compared to 2016 and the 2013 baseline
- 10.2 Appendix 2 - Streetlighting electrical consumption and cost over time
- 10.3 Appendix 3 - Energy and Water Strategy 2018-2022 annual action plan 2018/19

11. BACKGROUND DOCUMENTS

Energy data monitoring 2017/18

- 11.1. The energy consumption data for the corporate gas and electric accounts (everything included in the strategy baseline) is presented in appendix 1. The data shows consumption in the current financial year from April to December and compares this period with the same period last year and the baseline year.
- 11.2. The gas and electric comparison tables are sorted by the difference in the current year to the baseline year. They show the meters with the greatest kWh consumption saving against the baseline at the top. Each row of the table is showing a meter at any given site. This means that some sites e.g. Town Hall gas have two entries. Overall there has been a 25% reduction in electrical usage including streetlighting and a 1% reduction in gas consumption.
- 11.3. Some large savings have been made on the borough's electrical supplies. The streetlighting savings are now starting to show producing almost 1 GWh of savings. Hines Meadow is still producing large savings too as is the Town Hall. These supply points as well as many others are driving the Council's overall savings.
- 11.4. Of course there are also sites that have not made any electrical savings and have increased in consumption compared to the baseline. Most noticeable is the Jubilee fountain at the bottom of the table. The trouble with this site was the regularity of the meter readings. The readings have distorted the baseline figure which is underestimated in reality. Braywick Park Sports Centre had a problem with their biomass boiler and so the electric backup kicked in to heat the showers. Some adjustments were made to reduce the amount of water being electrically heated in the building. The increase at St Mary's house is due to an increase in staff levels in the building. Grenfell park fountain has increased due to a café start up in the park.

11.5. The gas table shows roughly an equal number of meters that are making a reduction against the baseline to an increase. The kWh differences are also much smaller than on the electric table. The largest increases against the baseline were at Tinkers Lane Depot, the Town Hall and Oakbridge Day Centre. With Tinkers Lane Depot there are a couple of points, firstly that the depot is being used for longer hours now compared to the baseline and secondly that the boiler controls didn't automatically put the boilers into summer mode and so the boilers weren't switched off over the summer. The Town Hall consumption has been higher than the baseline too. This is partly due to a problem with the controls over the Christmas period but mainly due to underestimation during the baseline period. A comparison to last year is showing a reduction in gas usage of 16% on the main boilers which is really positive. Oakbridge Day Centre has increased in consumption slightly due to low level out of hours usage of gas. This issue has been reported to shared building services to resolve.

Streetlighting Performance

11.6. Streetlighting monthly consumption is presented in appendix 2. The data presented shows the current strategy baseline consumption and the consumption over the following 4 years. The years are shown April to January to provide a comparison to the current year's available data.

11.7. The graph shows the four years prior to the 2017/2018 year performing in much the same way through the year. The most recent year, however, presents a different picture with the consumption profile veering away from the previous annual profile.

11.8. Compared to the baseline the current year is showing a reduction of almost 22%. This is due to the roll out of the LED upgrade programme in 2017. Whilst the percentage indicates that the LED programme is roughly a third of the way through, in reality the program will be complete at the end of February 2018. At the end of February the final inventory will be updated to correct the billing. This inventory will update December 2017 to February 2018 consumption in the energy billing. The period February 2017 – November 2017 has already been updated with the electric supplier. This means that the consumption data shown is correct for April 2017 – November 2017 but beyond this the figures are not correct until the inventory charge codes are updated and backdated.

Energy and Water Strategy 2018-2022

11.9. The first draft of the new energy and water strategy is almost complete. The strategy will be sent out for internal consultation over the next period and then will come to the panel in the May meeting.

11.10. The proposed action plan for 2018/19 is attached in appendix 3. This action plan uses the new energy and water strategy 2018-2022 topics and actions as a basis for the plan.

11.11. The action plan is ordered by the targeted completion date with the earlier actions at the top of the list. The list is longer than previous years and this is because it is bringing together a number of different energy management topics into one action plan. In the past work has been carried out outside of

the annual plan. The new strategy looks to bring all energy and water work areas together.

11.12. A few examples of items that have been brought into the proposed new action plan are the energy and water contract actions, Systemslink (the Council's energy and water management database) updates, legislation, carbon reporting etc. Alongside this work is the usual energy reduction, renewables, energy supplier switching, energy awareness etc work that has been included in the action plans over the last four years.

11.13. Interim targets proposed for the year include a 1% energy reduction in the corporate estate and a 0.5% water reduction in the corporate office buildings. Projects being investigated include a solar car port at Braywick Leisure centre, a roof solar installation at Braywick Leisure centre, a water source heat pump in the York stream, splitting Desborough Suite into heating zones, the Town Hall chiller pumps, adding submetering to the BMS, mechanical ventilation to the town hall ground floor fan coil units and pipework valve jackets at the town hall.

Formation of the new 2016/17 energy and water baselines

11.14. Moving into the new strategy period it is proposed that the 2016/17 year is used as the baseline for the strategy targets. This is because this year should be more reliable than the previous 2013/14 baseline due to increased smart metering.

11.15. The scope of the 2013/14 baseline was all corporate meters on the electric and gas contracts. This baseline included sites that are now Action for Children (AfC) and Optalis controlled and excluded the sites that transferred to Legacy Leisure or were schools.

11.16. Whether the AfC and Optalis sites should be included in the new baseline is open to debate. With the leisure sites that were removed from the baseline in the current strategy, they were removed from the energy contracts and full ownership for the energy usage and contracts was taken over by Legacy/ Parkwood Leisure.

11.17. With AfC and Optalis the picture is different. All of the relevant sites still remain on the Council's energy contracts and the Council is running the buildings for them in terms of maintenance. However, there is less impetus to invest at these sites with energy efficiency measures since the energy bills are only indirectly paid directly by the Council. The Council does of course have a stake in both companies. Overall it is proposed, since the Council effectively pays for the Optalis/ AfC services, that these sites should be included in the 2016/17 baseline for corporate sites.

Tap volumiser trial

11.18. The tap volumisers have now been installed on the ground floor of the Town Hall. 26 of the 28 volumisers could be installed. 4 taps were also replaced as part of the work. Most of the taps with the volumisers installed appeared to be working fine although some older push taps weep from the push mechanism after being pushed. Some Soaked stickers have been put up in the wash

rooms where we have installed the volumisers. The stickers highlight the water saving potential of the volumisers.

11.19. Two volumisers couldn't be replaced because the existing insert was found to be completely stuck inside the tap. This meant that they had to be left. The only way to resolve the issue is to replace those taps and so they will need to be picked up later if the project is expanded further.

11.20. The Town Hall water consumption is now being monitored to see what difference the volumisers make in reality. Once enough data has been gathered this will be presented to the panel.

Proposed work plan over the next period

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

- Energy and Water Strategy 2018-2022 consultation and revisions.
- Water saving project development subject to positive results on the ground floor of the Town Hall.

12. CONSULTATION (MANDATORY)

Name of consultee	Post held	Date sent	Commented & returned
Cllr Coppinger	Lead Member for Sustainability	23/02/2018	26/02/2018
Cllr Mills	Chairman of the Sustainability Panel	23/02/2018	27/02/2018
Lisa Pigeon	Environmental Health Lead	13/02/2018	23/02/2018

REPORT HISTORY

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

Appendix 1 - Electrical usage comparison for April to December 2017 compared to 2016 and the 2013 baseline

Site	13/14 Baseline	2016/17	2017/18	Difference to Baseline (kWh)	% Difference to Baseline	Difference to last year (kWh)	% difference to last year
STREETLIGHTING	4,320,324	4,287,899	3,413,346	-906,977	-21%	-874,552	-20%
HINES MEADOW CAR PARK	637,343	266,457	252,138	-385,205	-60%	-14,319	-5%
HINES MEADOW CAR PARK	450,704	154,087	157,860	-292,844	-65%	3,773	2%
TOWN HALL	911,653	710,715	696,987	-214,666	-24%	-13,728	-2%
STAFFERTON WAY CAR PARK	315,855	218,621	205,667	-110,188	-35%	-12,954	-6%
4 MARLOW ROAD	127,707	120,906	41,635	-72,067	-63%	-79,271	-66%
VICTORIA STREET CAR PARK	127,307	98,353	99,934	-57,373	-45%	-28,419	-29%
NICHOLSONS CAR PARK	351,859	342,294	309,719	-122,140	-35%	-32,575	-10%
MAIDENHEAD LIBRARY	207,857	173,634	166,058	-41,799	-20%	-7,476	-4%
TINKERS LANE DEPOT	316,284	285,327	290,892	-25,982	-8%	5,565	2%
WINDSOR GUILDHALL & Corn Exchange F/lighting	52,839	30,339	34,025	-18,814	-36%	3,686	12%
WINDSOR COACH PARK	55,155	36,155	36,746	-18,409	-33%	591	2%
Larchfield Community Centre	19,283	11,897	11,059	-8,224	-43%	-838	-7%
COOKHAM LIBRARY	21,634	15,410	14,457	-7,177	-33%	-953	-6%
ETON LIBRARY	7,454	4,955	2,636	-4,818	-65%	-2,319	-47%
RAWCLIFFE HOUSE	12,523	9,026	7,912	-4,611	-37%	-1,114	-12%
ALMA ROAD CAR PARK	8,071	4,106	3,493	-4,578	-57%	-613	-15%
MANOR YOUTH CENTRE	12,450	9,244	8,001	-4,449	-36%	-1,243	-13%
BATCHELORS ACRE FOUNTAIN	22,040	19,435	17,811	-4,229	-19%	-1,624	-8%
OAKBRIDGE DAY CENTRE	28,264	26,929	24,328	-3,936	-14%	-2,601	-10%
BRAYWICK NATURE CENTRE	7,328	4,552	4,608	-2,720	-37%	56	1%
WINDSOR LIBRARY	48,724	44,794	46,007	-2,717	-6%	1,213	3%
PINKNEYS GREEN Y. & C.CENTRE	8,732	5,864	6,043	-2,689	-31%	179	3%
Canoe Cante/Hurley Lock Amenity Building	6,756	6,153	4,313	-2,443	-36%	-1,840	-30%
Public Convenience - Batchelors Acre	10,374	8,739	8,808	-1,566	-15%	69	1%
WEST STREET CAR PARK	3,797	3,976	2,343	-1,454	-38%	-1,633	-41%
PUBLIC CONVENIENCE-ASCOT	5,123	3,293	3,684	-1,439	-28%	391	12%
PUBLIC CONVENIENCE-ETON COURT	5,116	3,700	3,733	-1,383	-27%	33	1%
RAY MILL ISLAND KIOSK	15,630	14,403	14,494	-1,136	-7%	91	1%
OLD WINDSOR LIBRARY	3,819	3,305	2,689	-1,130	-30%	-616	-19%
PUBLIC CONV. SUTTON ROAD	2,280	1,288	1,282	-998	-44%	14	1%
WALDECK HOUSE	21,962	24,175	21,515	-447	-2%	-2,660	-11%
PUBLIC CONVENIENCE - Sunninghill	1,879	2,650	1,458	-421	-22%	-1,192	-45%
PUBLIC CONVENIENCE - IMPERIAL PARK	381	719	125	-256	-67%	-594	-83%
MAIDENHEAD PROJECT CENTRE	26,728	29,975	26,552	-176	-1%	-3,423	-11%
ETON WICK YOUTH CLUB	9,685	8,973	9,576	-109	-1%	603	7%
HIGH STREET FEEDER PILLAR	158	485	485	-66	-42%	-393	-81%
GEORGE V MEMORIAL	4,713	4,892	4,653	-60	-1%	91	2%
Shifford Crescent - Library Container Post	405	399	390	-25	-6%	-19	-5%
GARAGES-REAR OF STAFFERTON LODGE	214	164	202	-12	-6%	38	23%
FRASCATTI WAY PUMPING STATION	46	50	36	-10	-21%	-14	-28%
WINDSOR Y & C. CENTRE	22,285	21,718	22,281	-4	0%	563	3%
TELEMETRY STATION	0	0	0	0	0%	0	0%
WINDSOR CEMETERY (Chapel & Cncl Depot)	0	0	0	0	0%	0	0%
PUBLIC CONVENIENCE-CHRISTIAN SQUARE	6	4	6	0	1%	2	50%
BRIDGE ROAD PUMPING STATION	55	61	77	22	41%	16	26%
JUBILEE CLOCK TOWER	688	713	717	29	4%	4	1%
SAINSBURY'S PUMPING STATION	58	120	114	56	97%	-6	-5%
CLARENCE ROAD PUMPING STATION	126	197	208	82	65%	11	6%
WEST STREET PUMPING STATION	73	161	171	98	136%	10	6%
ETON LIBRARY	1,770	2,043	1,896	126	7%	-147	-7%
PRIDES CROSSING PUMPING STATION	114	404	246	132	117%	-158	-39%
CLARENCE ROAD PUMPING STATION	85	186	242	157	184%	56	30%
WINDSOR CEMETERY (Chapel & Cncl Depot)	292	342	556	264	90%	214	63%
BOURN DITCH KIOSK PUMPING STATION	539	825	818	279	52%	-7	-1%
RAWCLIFFE HOUSE (Industrial Unit)	1,805	3,063	2,154	349	19%	-909	-30%
HOME PARK, Mess Room	1,972	2,808	2,433	461	23%	-375	-13%
YORK ROAD FLATS	123	765	663	540	441%	-102	-13%
MILLHOUSE FAMILY CENTRE	3,266	6,363	3,839	573	18%	-2,524	-40%
MINSTER COURT	25,677	28,377	26,503	826	3%	-1,874	-7%
OAKLEY GREEN CEMETERY	6,799	10,061	7,860	1,061	16%	-2,201	-22%
STAFFERTON LODGE	4,580	10,002	5,664	1,084	24%	-4,338	-43%
SUNNINGHILL LIBRARY	4,650	5,851	6,038	1,388	30%	187	3%
RIVER STREET CAR PARK & TOILETS	2,644	3,155	4,468	1,824	69%	1,313	42%
OAKEN GROVE SPORTS PAVILLION	15,032	12,233	16,897	1,865	12%	4,664	38%
OAKLEY GREEN CEMETERY	6,352	854	8,220	1,868	29%	7,366	863%
ST MARY'S HOUSE	20,773	22,307	24,265	3,492	17%	1,958	9%
MILLHOUSE FAMILY CENTRE	3,084	5,369	7,189	4,105	133%	1,820	34%
Deidworth Road Sports Pavillion	11,604	15,057	16,016	4,412	38%	959	6%
VANSITTART SKATE PARK	61	4,640	4,675	4,614	7564%	35	1%
PUBLIC CONVENIENCE, HOME PARK	3,464	2,183	8,958	5,494	159%	6,795	314%
AVIARY BLDG	7,541	15,947	13,567	6,026	80%	-2,380	-15%
WALDECK HOUSE	10,661	11,576	17,393	6,732	63%	5,817	50%
GREENFELL PARK FOUNTAIN	2,583	10,872	9,742	7,159	277%	-1,130	-10%
ST MARY'S HOUSE	11,943	20,335	20,641	8,698	73%	306	2%
BRAYWICK PARK SPORTS CENTRE	17,956	40,442	30,846	12,890	72%	-9,596	-24%
JUBILEE FOUNTAIN	10,605	86,877	49,924	39,319	371%	-36,953	-43%
8,375,411	7,343,779	6,242,584	-2,132,826	-25%	-1,101,194	-15%	

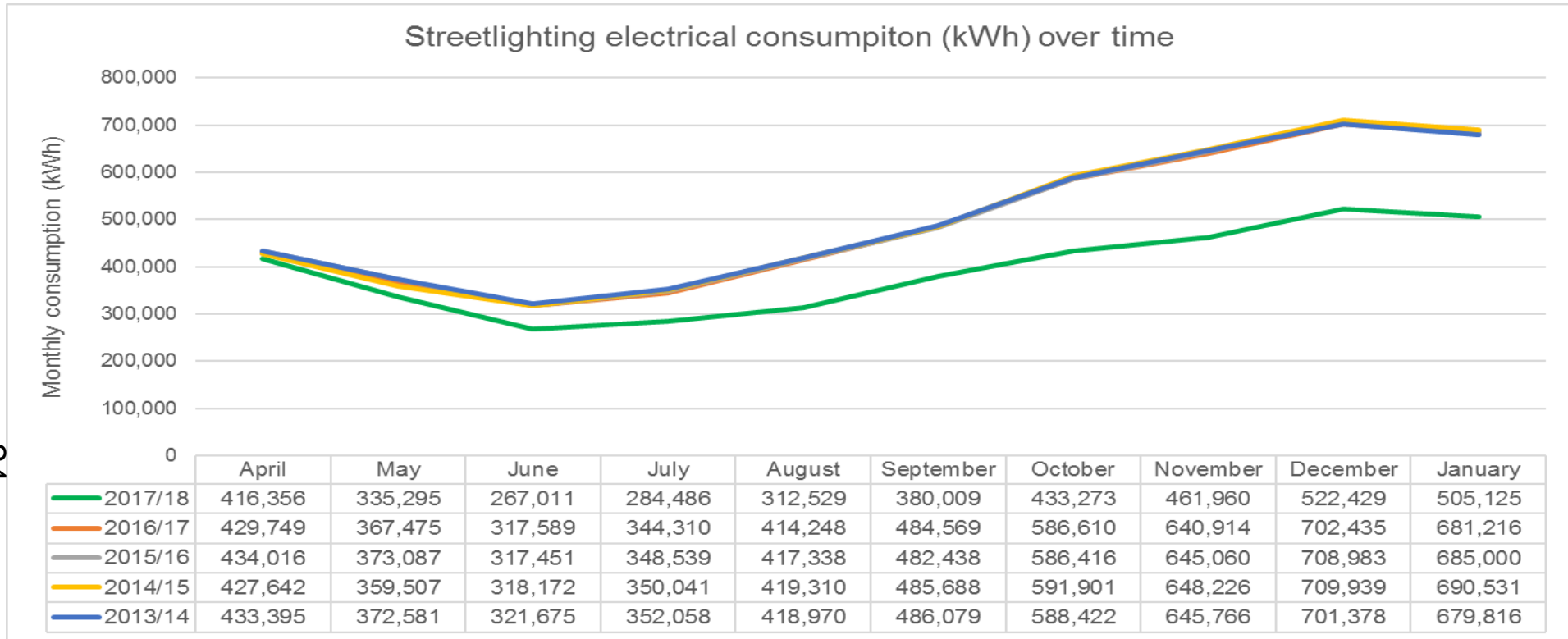
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Gas usage comparison for April to December 2017 to 2016 and the 2013 baseline

Site	2013 Baseline	Last year (2016)	Current year (2017)	Difference to Baseline (kWh)	% Difference to Baseline	Difference to last year (kWh)	% difference to last year
MINSTER COURT	33,729	16,598	12,268	-21,461	-64%	-4,330	-26%
WINDSOR LIBRARY	49,770	39,288	31,494	-18,276	-37%	-7,794	-20%
COOKHAM LIBRARY	32,173	28,649	20,076	-12,097	-38%	-8,573	-30%
WALDECK HOUSE	22,922	17,390	12,821	-10,101	-44%	-4,569	-26%
WINDSOR COACH PARK	60,885	44,609	51,367	-9,518	-16%	6,758	15%
MAIDENHEAD PROJECT CENTRE	49,441	42,511	42,817	-6,624	-13%	306	1%
SUNNINGHILL LIBRARY	6,251	1,650	11	-6,240	-100%	-1,639	-99%
PINKNEYS GREEN Y. & C. CENTRE	30,804	32,577	26,235	-4,569	-15%	-6,342	-19%
WINDSOR GUILDHALL	51,637	51,842	47,534	-4,103	-8%	-4,308	-8%
MILLHOUSE FAMILY CENTRE	9,452	5,592	6,508	-2,944	-31%	916	16%
ETON WICK YOUTH CLUB	10,684	9,166	8,437	-2,247	-21%	-729	-8%
DATCHET Y. & C. CENTRE	6,153	4,295	5,048	-1,105	-18%	753	18%
ST MARY'S HOUSE	15,481	23,274	15,168	-313	-2%	-8,106	-35%
Charters Youth & Community Centre	4,389	4,252	5,589	1,200	27%	1,337	31%
TOWN HALL	42,283	43,027	46,562	4,279	10%	3,535	8%
WALDECK HOUSE	22,796	32,921	27,119	4,323	19%	-5,802	-18%
BRAYWICK NATURE CENTRE	9,614	16,240	17,230	7,616	79%	990	6%
OAKBRIDGE DAY CENTRE	73,865	73,517	86,662	12,797	17%	13,145	18%
TOWN HALL	131,347	185,789	155,505	24,158	18%	-30,284	-16%
TINKERS LANE DEPOT	47,537	67,464	85,407	37,870	80%	17,943	27%
	711,213	740,651	703,858	-7,355	-1.0%	-36,793	-5.0%

Current year was
 7% warmer than last year
 24% warmer than baseline

Appendix 2 - Streetlighting electrical consumption and cost over time



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Year	Total consumption for April to January Period (kWh)	Difference to baseline (kWh)	Percentage difference compared to baseline	Cost for April to January Period (£ exc VAT)
2017/18	3,918,472	-1,081,668	-21.63%	£442,439
2016/17	4,969,115	-31,025	-0.62%	£555,938
2015/16	4,998,328	-1,811	-0.04%	£527,338
2014/15	5,000,956	817	0.02%	£491,448
2013/14	5,000,139			£475,256

Appendix 3 - Energy and Water Strategy 2018-2022 annual action plan 2018/19

Strategy Code	Strategy Action	Planned work activity	Result	Target Completion Date
VfM2	Managing and Improving contracts	Transfer of all non half hourly and remaining half hourly electric accounts to EDF Energy	Council moves electric accounts to a supplier it is happy to work with and reduces supplier administration fees in the process.	30/04/2018
M&T6	Record keeping	Update systemslink energy database with EDF information	Relevant EDF account information updated in systemslink.	31/05/2018
M&T6	Record keeping	Update systemslink energy database new contract information for the year.	Contracts updated in systemslink to allow validation of bills.	31/05/2018
M&T1	Smart metering	All Council smart metering reviewed	Metering set up checked and any issues resolved.	31/05/2018
P1	Energy Efficiency	Schools Energy Saving Competition	Set up and run schools energy saving competition (subject to interest).	31/05/2018
P3	Renewables	Biomass boiler at St Edwards Middle School	Support school with EU funding subject to EU funding availability and diocese funding availability.	31/05/2018
M&T4	Exception Reporting	Review exception reporting	Exception reporting checked and adjusted to ensure working as expected.	30/06/2018
P1	Energy Efficiency	Deliver Energy Company Obligation (ECO2t) to the borough	Best route to deliver ECO2t scheme found and scheme delivered to borough subject to panel approval.	31/07/2018
P3	Renewables	Feasibility for a solar car port at Braywick Leisure Centre	Business case for solar car port at Braywick Leisure Centre presented to panel. Decision made whether to proceed with project.	31/07/2018
L1	Display Energy Certificates	Deliver Display Energy Certificates for Council buildings	Corporate buildings remain compliant with the energy performance of buildings regulations.	31/08/2018
M&T5	Annual & within year reporting	Annual greenhouse gas report	End of year greenhouse gas report delivered.	31/08/2018
VfM4	Service Level Agreements	Deliver Display Energy Certificates to schools	Schools signing up to the SLA remain compliant with the energy performance of buildings regulations.	31/08/2018
VfM2	Managing and Improving contracts	Set up a RBWM water contract	Framework identified. Water contract procured for all corporate sites, Optalis sites, AfC sites and maintained schools as required.	30/09/2018
P1	Energy Efficiency	Chiller pump efficiency works	Business case presented to panel. Decision made whether to proceed with project.	30/09/2018
M&T2	Sub metering	Add submetering to BMS	Sub metering connected to the BMS system subject to final feasibility.	30/09/2018
P1	Energy Efficiency	Town Hall mechanical fresh air to fan coil units	Business case presented to panel. Decision made whether to proceed with project.	30/09/2018
P1	Energy Efficiency	Valve jackets Town Hall	Business case presented to panel. Decision made whether to proceed with project.	30/09/2018
P1	Energy Efficiency	Investigate possibility for the Desborough suite to be split into three zones.	Business case presented to panel. Decision made whether to proceed with project.	30/11/2018
P3	Renewables	Watersource heat pump feasibility	Feasibility for a water source heat pump in York Ditch delivered and presented to panel.	30/11/2018
VfM2	Managing and Improving contracts	Energy Switch to Save auction October 2018	Collective switching scheme delivered to help residents to save money on their energy bills.	30/11/2018
P6	Auditing and Surveying	Audit electrical usage of Town Hall	Detailed flow diagram of electrical consumption in the Town Hall drawn up.	31/01/2019
P3	Renewables	Braywick Leisure Centre roof PV	Seek private funding for scheme. Install system (at appropriate time for leisure centre development) subject to funding partner being found and panel approval.	31/03/2019
M&T3	Site Targets	Energy target for corporate sites on contract	1% energy reduction compared to the 2017/18 baseline.	31/03/2019
M&T3	Site Targets	Water Target for corporate office sites	0.5% water reduction of corporate offices compared to the 2017/18 baseline	31/03/2019
VfM4	Service Level Agreements	Set up Action for Children SLA	Energy services provided to AfC as required.	31/03/2019
VfM4	Service Level Agreements	Finalise Optalis SLA and deliver	Energy services provided to Optalis.	31/03/2019
M&T5	Annual & within year reporting	Energy consumption breakdown to each Sustainability Panel	Panel is kept up to date with the progress to meet the annual energy reduction target.	Every panel

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