Title: Energy Reduction Manager Update
Contains Confidential or Exempt Information?: NO - Part I
Member reporting: Councillor Coppinger, Lead Member for Sustainability
Meeting and Date: Sustainability Panel - 27 November 2017
Responsible Officer(s): Andy Jeffs, Executive Director

David Scott, Head of Communities, Enforcement & Partnerships Wards affected: All



# **REPORT SUMMARY**

- 1. This report provides an overview of the progress being made to deliver the Council's energy and water reduction strategy.
- 2. This update report recommends that members note progress and comment on the proposed work plan for the next period. It provides initial information on the new strategy 2018-2022, an update on this year's sustainability strategy action plan, an update on the Town Hall building management system & LED lighting phase 2 projects, an update on the Energy Switch to Save Scheme and information on a EU Structural Investment Funds bid. The report recommends that an Energy and Water strategy replaces the Sustainability strategy and that the water reduction target baseline is changed from the 2013/14 year to 2016/17.
- 3. Recommendations are being made because it is important that Members provide comment and direction on the work being carried out and that the sustainability strategy targets are met.

### 1. DETAILS OF RECOMMENDATION(S)

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

**RECOMMENDATION:** That a new energy and water strategy is written to replace the existing sustainability strategy.

**RECOMMENDATION:** That the water reduction target uses the 2016/17 year as the baseline rather than 2013/14.

## 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.

Option	Comments
<ul> <li>(a) The Council does not work towards the sustainability strategy.</li> <li>This is not recommended</li> </ul>	<ul> <li>(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.</li> </ul>
<ul> <li>(b) The Council works according to the current and any future sustainability strategy.</li> <li>This is the recommended option</li> </ul>	(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 Council replaces the Sustainability strategy with an Energy and Water strategy. This is the recommended option	c) This would allow the Energy Reduction Manager to focus on energy and water reduction. Other teams will still be able to report into the Sustainability Panel as they currently do. (Para 11.2, 11.3)
(d) The Council uses the 2016/17 year as the baseline for the	(d) The current baseline for the target is not reliable and it doesn't take

#### 2.4 **Table 1: Report options**

Option	Comments		
water reduction target.	into account the work that has		
This is the recommended	been done to reduce water		
option	usage.(Para 11.6)		

## 3. KEY IMPLICATIONS

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

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

# 4. FINANCIAL DETAILS / VALUE FOR MONEY

4.1 No new funds are being sought through this paper.

# 5. LEGAL IMPLICATIONS

5.1 None.

### 6. RISK MANAGEMENT

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

Risks	Uncontrolled Risk	Controls	Controlled Risk
Targets for overall energy and water reduction are not	High	By providing updates at each panel meeting, Members are	Low
met.		able to keep track	

Risks	Uncontrolled Risk	Controls	Controlled Risk
		of overall progress to ensure the Council meets its annual projected reductions and savings commitments.	
Increasing energy and water costs for the council puts additional pressures on budgets.	High	By providing updates at Panel meetings on progress to reduce energy and water usage and progress on securing the best available energy contracts, Members will be able to assess the work that is taking place to ensure that cost increases are minimised as far as possible.	Low

## 7. POTENTIAL IMPACTS

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

## 8. CONSULTATION

8.1 None

### 9. TIMETABLE FOR IMPLEMENTATION

#### 9.1 Table 5: Timetable

Dat	e	Details
31/0	03/2018	Completion of current annual plan.

#### 10. APPENDICES

10.1 Appendix 1 – Progress against action plan 2017/18

### 11. BACKGROUND DOCUMENTS

#### New strategy 2018-2022

- 11.1. The current Sustainability Strategy 2014-2018 will finish at the end of March next year and so a new strategy will need to be put in place beyond this. The current strategy that the Sustainability Panel is working to is a Sustainability Strategy and currently covers energy, transport and waste.
- 11.2. Whilst the Sustainability Strategy looks to encompass energy, transport and waste, in reality most of the work of the Sustainability Panel is geared around energy and carbon reduction. It is therefore proposed that the future strategy is purely based on energy and water topics rather than Sustainability as a wider field. The waste and transport fields have strategies in place but energy does not and so it is felt that this greater focus would help going forward. The Council's energy and water usage as well as carbon emissions would still be monitored as part of the new strategy to ensure reductions continue to be made.
- 11.3. Another matter to consider is the future of the Sustainability Panel. It has been proposed as part of the ward boundary review that the Sustainability Panel is one of the meetings that is dropped when the changes are made in May 2019. If this is the case then individual fields i.e. Transport, Waste, Energy will need to report to the relevant replacement overview and scrutiny panel. Since there is not a member of staff that is directly responsible for Sustainability but there are staff members responsible for the various fields it perhaps makes sense to have individual strategies for each field.

#### Sustainability strategy action plan 2017/18 progress update

- 11.4. A progress table for the first 6 months of the year can be found in appendix 1. Overall the table shows progress against the action plan with many actions either completed or currently being carried out. The energy saving target appears well on target but unfortunately the water saving target is not progressing as hoped.
- 11.5. The water saving target for the corporate office buildings, namely Town Hall, Tinkers Lane Depot, St Mary's House is not currently performing well against the baseline. The water consumption was 1.8% higher over the first 6 months of 2017 compared to the baseline figures when the target was a reduction of 3%.
- 11.6. Following a review of the water usage figures a number of issues were identified. Firstly the water baseline figures are unreliable. Two of the three sites needed to have the original baseline adjusted so that the baseline was more realistic. One site needed the baseline consumption to be increased and the other needed it reduced. This was because the billing data supplied by the water suppliers was very poor quality. The data used to form the baseline shouldn't have been relied upon. Any adjustments made to the baseline were made based on more reliable billing data from the site.
- 11.7. Secondly, although some large savings are being made this year compared to last year at the Town Hall, it would appear that during the baseline year there

were not very high levels of usage. This means the savings made over this strategy period at this site are not being fully accounted for.

- 11.8. Thirdly, estimated billing in the current year at Tinkers Lane Depot may mean that the usage is not accurate. There was a problem with the logger on the site but this has now been resolved.
- 11.9. Moving forward, it seems unlikely that the target as it stands will be met. Works to reduce water usage will still be carried out where possible but there is limited scope to reduce the water usage by the required 194m3 when over the first 6 months water usage was higher by 62m3 using the adjusted baseline.
- 11.10. One possibility is to compare this year's consumption against last year's consumption (2016/17) to determine whether the target has been met. Of course this isn't a comparison to the baseline but it would show the work of the panel to reduce water consumption in the corporate office buildings. When comparing the first 6 months of 2016/17 to the first 6 months of the current year it shows that a 10% reduction has been made. This is obviously a very different picture to the 1.8% increase compared to the 2013/14 baseline year.

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

- 11.11. The building management system (BMS) is currently in the final stages of its set up. The Town Hall's heating/ cooling is being controlled by the BMS now. Final tweaks are currently being made before the full handover of the system happens.
- 11.12. The LED lighting project is complete with some final snagging left to do.

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

- 11.13. The October Energy Switch to Save auction has now ended and the registrant supply contracts were offered to two energy suppliers; SSE and Boost (prepayment section of Ovo Energy). Offer emails have now gone out to the 133 residents that took part. Currently the average saving per household is £243.
- 11.14. The last auction had 147 registrations by the end. Residents can still sign up for the current auction cycle until the end of November and so there is still time to try and improve on the last auction.

#### EU Structural Investment Funds

- 11.15. An opportunity has come about to access EU Structural Investment funding for a number of projects in the borough. The project is looking at ways to stimulate local enterprises in the low carbon/energy fields.
- 11.16. An outline bid for funding has been placed for a project named Thames Valley New Energy and the borough agreed to be a strategic partner. They are looking to support 50 - 100 local enterprises (private and social) to drive innovation and growth in the region's low carbon sector; generate local renewable energy; reduce energy consumption and CO2 emissions; and deliver sustainable economic growth.

- 11.17. Currently there are 3 projects being reviewed: the installation of a water source heat pump in the York Stream to feed either Maidenhead Library or the Town Hall, the installation of a solar powered electric vehicle charging station at the new Braywick Leisure Centre and the installation of a biomass boiler heat network between one/ two schools. The projects needed to be innovative and/or contain renewable technologies.
- 11.18. So far an outline bid was accepted for £1.5m of funding. This funding is to be matched with local funding to create a total £3m budget for the programme. Both Reading Borough Council and Slough Borough Council have also put projects forward for the programme.
- 11.19. A full application for the funding has now been made. If the application is successful then the funding will be made available next year and it would need to be used over the next 3 years. The Council could potentially receive in the region of 120k of funding through the scheme. Internal and external funding sources will be used to match this funding. The borough would likely be looking to develop the projects in 2018 and 2019 if the application is successful.
- 11.20. The panel will be informed about any further progress. It must be stated at this stage that the proposed projects might not necessarily go ahead even though they are included in the bid.

#### Proposed work plan over the next period

- 11.21. The work being carried out between now and the next Sustainability Panel will be:
  - Writing up the new Sustainability/ Energy Strategy 2018-2022
  - Schools energy saving competition set up
  - Water saving project development and installation

Name of consultee	Post held	Date sent	Commented & returned	
Cllr Coppinger	Lead Member for Sustainability			
Cllr Mills	Chairman of the Sustainability Panel			
Lisa Pigeon	Environmental Health Lead	31/10/17	01/11/17	

# 12. CONSULTATION (MANDATORY)

#### **REPORT HISTORY**

Decision type:	Urgency item?
Non-key decision	No

Report Author: Michael Potter, E	Energy Reduction Manager, 01628 682949

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Code	Work theme	Action	Result	Responsibility	Target Completion Date	Progress	RAG	Next steps
E1	Energy Reduction in Council buildings	Reduce energy usage by 15% compared to 2013/14 baseline	15% energy reduction on 2013/14 baseline	Energy Reduction Manager	31/03/2018	12.2% reduction to the end of September 2017	Green	Continue to monitor performance and highlight any issues quickly when they do occur.
E1	Energy Reduction in Council buildings	Replace buildling mangement system at Maidenhead Town Hall.	New building management system installed at Maidenhead Town Hall.	Energy Reduction Manager	30/09/2017	New BMS installed. Slightly behind schedule. Final changes currently being made.	Amber	Finalise system and handover.
E1	Energy Reduction in Council buildings	Install phase 2 LED lighting programme	Phase 2 LED lighting installation programme completed	Energy Reduction Manager	31/07/2018	Almost complete. Final snagging to be finished.	Amber	Complete snagging and handover.
E3	Residents Energy Reduction	Implement Energy Swtich to Save auction	Residents reduce their energy expenditure	Energy Reduction Manager	31/12/2018	Auction implemented.	Blue	Complete
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	31/03/2018	Schemes at York House, Braywick Leisure Centre and Tinkers Lane Depot being investigated.	Amber	Determine whether it is possible to install more PV at York House in collaboration with the developers. Review Braywick Leisure solar installation - determine business case. Tinkers Lane depot - determine cost of replacing roof covering and include in business case.
S1	Council sustainability awareness	Implement staff energy awareness programme	Implement staff energy awareness programme using a drip feed information approach	Energy Reduction Manager	31/03/2018	Awareness programme implemented	Blue	Complete
W1/W2	Borough wide recyling and use of waste	Percentage of household waste sent for reuse and recycling	Waste sent for reuse and recycling incrased to 50%	Waste Strategy Manager	31/03/2018	Progress not reported at this stage.	Amber	Continue to monitor.
WAT1	Water reduction in Council buildings	Use meter data to determine sites with high water usage wastage. Act to reduce water consumption.	Act to reduce water consumption at 2 corporate sites.	Energy Reduction Manager	31/03/2018	Tap volumiser trial investigated at Town Hall. Initial issues with trial overcome. Now ready to implement.	Amber	Implement trial at Town Hall and monitor water consumpton. Roll out across building if successful. Implement at Tinkers Lane Depot/ St Mary's House.
WAT1	Water reduction in Council buildings	Reduce water usage in the Council's corporate office buildings by 3% in 2017/18 compared to a 2013/2014 baseline	Water consumption reduced by 3% in the Council's coprorate offices compared to the 2013/14 baseline.	Energy Reduction Manager	31/03/2018	Currently showing 1.8% increase over first 6 months against 2013/14 baseline. Suggest that baseline should be adjusted.	Red	Consider replacement of baseline to 2016/17. Carry out tap volumiser project to reduce water consumption.