Report for: ACTION Item Number:



Contains Confidential or Exempt Information	NO – PART I
Title	Energy Poduction Manager Undate
	Energy Reduction Manager Update
Responsible Officer(s)	David Scott, Head of Governance, Performance and
	Policy.
Contact officer, job title	Michael Potter, Energy Reduction Manager, 01628
and phone number	682949
For Consideration By	Sustainability Panel
Member reporting	Cllr Coppinger
Date to be Considered	30 <sup>th</sup> November 2015
Implementation Date if	Immediately
Not Called In	
Affected Wards	n/a
Keywords/Index	Energy Reduction Manager Update

## **Report Summary**

- 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. The paper also proposes setting a recommended heating and cooling temperature in Council offices.
- 2. This paper recommends that members note progress and comment on the proposed work plan. It also recommends that the Council adopts heating to 21 degrees and cooling to 24 degrees in offices.
- 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 Date		
(a) By reducing energy and waste costs, the Borough is	March 2016	
providing better value for money to its residents.		

#### 1 Details of Recommendations

- i. RECOMMENDED: Members are asked to note the progress made and comment on the proposed work plan.
- ii. RECOMMENDED: The target heating temperature in Council offices be set at 21 degrees and the target cooling temperature be set at 24 degrees.

## 2. Reason for Recommendation(s) and Options Considered

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 Council heats its offices to 21 degrees and cools its offices to 24 degrees.  Recommended	(c) The Council will be able to ensure energy is not wasted whilst maintaining comfortable office temperatures.

# 3. Key Implications

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

## 4. Financial Details

a) Financial impact on the budget (mandatory)

None

## 5. Legal Implications

There are no direct legal implications arising from this report.

## 6. Value For Money

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

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

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

Staff should have comfortable office working temperatures in order to carry out their work as set out in the Workplace (Health, Safety and Welfare) Regulations 1992. Exceptions to the temperature recommendations may be necessary for members of staff that have particular conditions that mean that the recommended temperatures are not suitable. This may mean that personal heaters/ fans are necessary for their comfort.

## 11. Staffing/Workforce and Accommodation implications:

Office temperatures often divide opinion. Some may find a particular temperature too hot whilst others too cold. The temperature recommendations seek to find a temperature that most people will find reasonable when wearing suitable clothing for that time of year.

#### 12. Property and Assets

This update contains content relating to the improvement of the Council's buildings and the information we collate about them.

#### 13. Any other implications:

None

#### 14. Consultation

N/A

#### 15. Timetable for Implementation

Current annual plan is due for completion on 31/03/16.

#### 16. Appendices

None

#### 17. Update Report

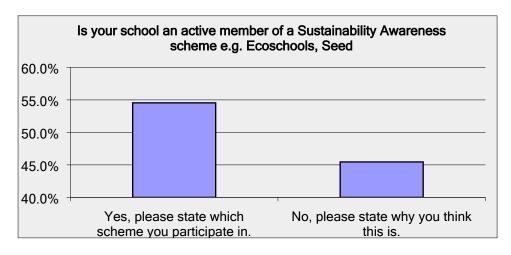
## 17.1 Schools Survey

A presentation was given at the last schools bursar meeting on the 6<sup>th</sup> October. The topics covered were sustainability awareness and energy reduction. Following the talk all schools were surveyed to gauge what sustainability schemes are currently implemented, what they are doing to reduce energy consumption and whether the Council can help with any of this. 22 out of the 64 schools surveyed responded and some of the key responses are set out below.

# Is your school an active member of a Sustainability Awareness scheme e.g. Ecoschools, Seed?

When asked whether the school was actively involved with a sustainability scheme such as Ecoschools or Seed, 54.5% of the schools responded by saying they were actively involved and 45.5% saying that they were not. It was very interesting that such a high percentage of schools indicated that they were not involved with a scheme bearing in mind that all schools are signed up to Ecoschools. Indeed, back in the late 2000s the schools were actively involved with Ecoschools as they were working towards the various award levels. Seven schools even reached the highest level of award – the green flag.

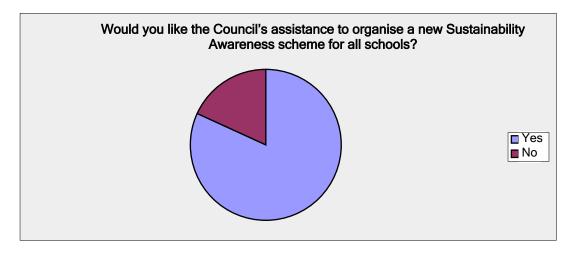
The schools that responded saying that they were still actively working towards a sustainability awareness scheme stated that Ecoschools was the main scheme they were involved with. A couple of schools also stated that they were members of Seed (Sustainability and Environmental Education) and one had their own ecowarrior scheme still running.



If schools answered no to the above question then they were asked why they thought this was. Responses provided were 'not sure', 'no staff member is responsible', 'we used to', 'lack of time/ time to investigate'.

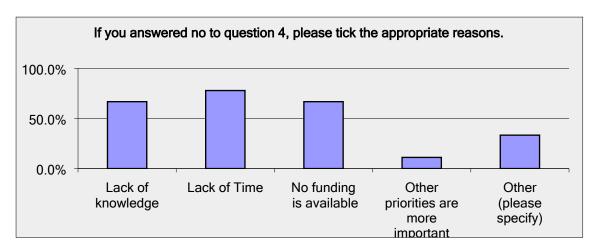
Would you like the Council's assistance to organise a new Sustainability Awareness scheme for all schools?

In response to this question the vast majority (81.8%) of respondents stated 'Yes'. This shows that there is a clear appetite for a sustainability scheme and they would welcome the assistance from the Council to achieve this. Whether all schools would take the opportunity up is unclear but the negative responses in the previous question suggest that maybe a number of schools do need some assistance to progress an initiative such as this. Further work with Head Teachers/Chairs of Governors would be required to promote the schemes and to get their support.



## Is your school currently implementing schemes to create energy savings?

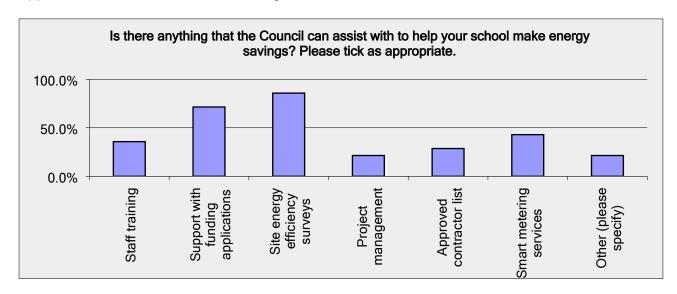
In response to this question, 59.1% of schools said no they were not implementing energy saving measures. Unfortunately this probably means that energy and therefore money is being wasted by schools. When asked why this was the case, the following response was provided:



The time pressures of the school environment are stated as the key reason for not implementing energy efficiency upgrades. This was followed closely by lack of knowledge and that no funding is available.

Is there anything that the Council can assist with to help your school make energy savings?

The schools were next given a list of ways that the Council could potentially help them to make energy reductions. The measure that schools found most appealing was site energy efficiency surveys. This would mean that the knowledge aspects of saving energy would be removed and at the end of the surveys schools would have a list of measures to implement. This was closely followed by support with funding applications and then smart metering.



## **Moving forward**

The survey was a useful exercise to understand how schools feel about energy and sustainability, what they are currently doing and how the Council could potentially help. Unfortunately not all schools responded to the survey (only about a third of schools responded) and this in itself may be an indicator that vast majority of schools are not very engaged or perhaps do not have time to respond.

However, there were three key areas for potential further investigation that stood out, these are:

- organising a schools sustainability awareness scheme,
- providing energy efficiency surveys,
- supporting schools with funding applications.

## 17.2 Collective Energy Switching

Some initial investigations into collective energy switching schemes have been carried out. It was found that many Council's around the country are/ have been involved in collective energy switching. None of the Berkshire authorities are currently involved in a switching scheme, although in the past (2013/14) a potential Berkshire wide scheme was discussed. Reading Borough Council are, however, currently considering an option to set up their own energy company in collaboration with a number of other Council's (currently non-Berkshire authorities).

Looking into what other Councils are doing it is clear that the majority of Council's are running switching schemes in collaboration with ichoosr. There is also another provider offering collective energy switching services called energyhelpline. Some

initial discussions have been held with these two providers to find out what they offer.

#### Ichoosr

Ichoosr work in partnership with 150 local authorities as well as other organisations and offer a collective energy switching service. The service works by ichoosr collating all households that are signed up across the various regions into a single pot – usually 30,000 - 40,000 households. A reverse auction is then held for the business of these potential customers 3 times a year. Once the supplier is agreed, ichoosr send out offer letters/ emails to the residents informing them of what savings could be made by switching. The offered contract would be a 12 month fixed tariff. If the resident accepts the offer, which they by no means have to, then ichoosr carry out all the processing of the contract details.

The Council would need to advertise the scheme on behalf of ichoosr. The scheme can have its own branding for the authority which would be shown on all communications. A full communications plan will be required via the web and local media. The usual route for households to sign up is via the webportal. However, there is also the option for Council staff to be trained to carry out this function. They can then register the householder on their behalf in a face to face meeting/ via the call centre. This option would be particularly useful for more vulnerable residents or those without access to the internet. Ichoosr also offer a call centre for any queries that residents/ staff may have.

Sign up to be part of the auction is usually between 1-3% of the households in an area and normally depends on the level of advertising provided by the authority. Of these signed up households roughly 30-40% actually switch provider.

The Council would earn a referral fee for advertising the scheme. It was made clear that the referral fee might cover costs but this would depend on the take up. The costs to the Council include officer time setting the scheme up, communications of the scheme and in house offline registrations. Of course wider communications would help ensure a higher sign up.

#### energyhelpline

Energyhelpline have been in the collective energy switching market since the beginning and initiated the 2<sup>nd</sup> collective switch ever. They are also the UK's second largest energy comparison service by volume after USwitch. They provide services for online comparison services such as 'compare the market' and 'go compare'. Energyhelpline provide collective switching schemes for Wales together? and a number of Councils. They also offer collective switching through newspapers e.g. the radio times, NHS, supermarkets and other routes.

The Energyhelpline approach is that they will operate all aspects of the switching service. The Council would be required to provide communications of the scheme via the website and local media. The Council can use its preferred branding for this exercise. Residents can sign up for the collective switch via the internet or by the phone directly with the energyhelpline call centre. Once residents are registered a reverse auction will be carried out – usually about 80,000 customers. Residents will

then be notified of the exclusive deal that is on offer. If they are online the resident will then click to view the deal in comparison to the rest of the market offering. If they are happy with the exclusive deal then they can accept it, otherwise if they wish they can accept another tariff offered in the comparison. If the resident is offline or prefers to they can call the Kent based call centre to find out about the offered deal and how it compares with the market.

The Energyhelpline have noticed that sometimes suppliers drop prices after an auction and so this is why they allow the resident to decide which deal to go for. Another reason is the resident may have a particular issue with a certain supplier due to past experiences and so prefer to not use the exclusive deal supplier even if it is cheaper. Energyhelpline also allow further residents to apply for the exclusive auction deal for a few weeks after the auction has been carried out. This allows residents to tell their friends and family about it and sign themselves up.

The Council would need to offer communications across the borough about the scheme and in return receive a referral fee. Marketing advice and design would be offered by the Energyhelpline.

## Comparison of the services

Although ichoosr and the Energyhelpline are offering a very similar service it was found that they are also distinctively different. Some of the key differences are:

- Ichoosr offer one exclusive tariff following the auction whilst Energyhelpline
  offer an exclusive tariff as well as a view of all the other tariffs on the market.
- Ichoosr prefer not to have an inbound call centre registration process whilst Energyhelpline do offer this. Ichoosr ask that the Council trains its staff to carry out face to face registrations/ over the phone registrations.
- The Energyhelpline referral fees are more attractive than Ichoosr.
- Energyhelpline allow further registrations on the auctioned tariff after the auction has been carried out but Ichoosr do not allow this.
- Even though Ichoosr are partnered with more Council's the Energyhelpline have roughly twice the number of participants in their auctions.

#### **Next steps**

The Council's procurement section are currently reviewing the above offers. Once this analysis has been carried out further information will be provided to the Sustainability Panel on how the scheme can be taken forward.

## 17.3 MaidEnergy Solar Cooperative

The Council has been supporting MaidEnergy to create a solar cooperative through the Social Enterprise Fund. It has provided financial support to enable them to set up the cooperative. The cooperative now have 6 sites pre-accredited for solar installations. This means that the proposed changes to the feed in tariffs in January will not affect the tariff they receive until a year after the date that the accreditation was approved. This is unless the feed in tariff is completely shut down in January

which is unlikely. They were eligible for the pre-accreditation status since they are classed as a community energy project.

At the moment the cooperative is seeking investment for the first two installations at Riverside Primary School and Norden Farm Centre for the Arts. Funding is being sought from residents and local organisations and they are offering a projected annual interest rate of 4.3%. If enough funding is received then these solar installations will be installed during December. The Social Enterprise Working Group is currently considering investing in the cooperative. They have asked for assurances from the cooperative in the form of a letter that proves that the scheme is backed by a loan before the Council invests.

#### 17.4 Adopt a building

Two sites have now been surveyed as part of the Adopt a Building scheme. This has highlighted 40 potential actions/ areas for further investigation to help reduce energy usage at the buildings. It will take time and funding for all the actions to be worked through, although some are already underway. For example, at Tinkers Lane Depot it was noted that the temperature was too hot so a number of adjustments have now been made to better regulate the temperature in the building. At 4 Marlow Road the lighting sensors have been adjusted where possible to help ensure that the lights only come on when there is occupancy and when the light levels fall to a certain limit. Some further works are required to upgrade some of the sensors to complete this piece of work. Also, the use of timers on the water heaters has also been investigated and quotes will be provided shortly.

There are three more buildings to survey under the Adopt a Building scheme and hopefully these too will highlight more options for energy savings.

#### 17.5 Temperature set points

It is proposed that the Council sets a policy on temperature in occupied buildings so that everyone is clear what the agreed temperature should be. The temperature that the Council heats its buildings to directly relates to the amount of energy consumed. The Carbon Trust states that for every 1 degree extra that a building is heated, up to 8% extra energy will be consumed. It is therefore important that buildings are heated to the correct temperature to ensure that comfort is maintained whilst using the least amount of energy possible. It is also worth stating that higher temperatures allow germs to breed more easily, and can make staff lethargic. Further to this, studies on temperatures in the workplace have shown productivity increases up to a temperature of 21-22 degrees and then reduces beyond this. Unfortunately one temperature doesn't always fit all and so a temperature that isn't too hot or too cold for the majority of people is what should be agreed as the set point.

Temperatures in the indoor workplace are covered by the Workplace (Health, Safety and Welfare) Regulations 1992, which place a legal obligation on employers to provide a 'reasonable' temperature in the workplace. The approved code of practice states that the temperature in the workplace should normally be at least 16 degrees. However, no upper temperature limit is provided.

The Chartered Institute of Building Services Engineers (CIBSE) recommends an office temperature of 20 degrees. They go on to say these temperatures may not, however, ensure reasonable comfort, depending on other factors such as air movement and relative humidity.

The Carbon Trust also recommends setting thermostats to 20 degrees. Again they state that this is generally what is recommended suggesting that a figure near to this would also be acceptable. The carbon trust also state that buildings shouldn't be cooled below 24 degrees.

The Council have agreed with MITIE that the heating set point where they have carried out works on the heating controls as part of the energy performance contract will be 21 degrees.

It is therefore proposed that buildings across the Council estate should be heated to 21 degrees. It is very close to the 20 degrees that CIBSE and the Carbon Trust recommend and allows a small amount of buffer.

Also, in line with the Carbon Trust's recommendation that buildings shouldn't be cooled below 24 degrees it is proposed that cooling set points be set at 24 degrees in occupied areas.

## 17.6 Website update

The sustainability webpages have been fully updated now and they mirror the sustainability strategy as far as possible. Under sustainability there is now a sustainability main page, a page for energy, a page for renewables and a page for water. Links are also provided to the waste and transport areas of the website.

Each page has some useful links such as the Carbon Trust home energy check in the residents section and a link to the Smart/ AMR data in the Council estate section of the energy page. A link to the Town Hall solar panel data can be found on the renewables page and links to water saving advice can be found on the water page.

## 17.6 Work planned over the next period

This includes:

- Ensuring the LED lighting project continues to run smoothly.
- Arranging site visits for Adopt a building.
- Creating a water consumption baseline.

# 18. Consultation (Mandatory)

Name of consultee	Post held and Department	Date sent	Date received	See comments in paragraph:
Internal				
Andrew Scott	Civic Team Manager	16/11/15	18/11/15	Throughout document

Cllr Sharpe	Sustainability		
	Panel Chairman		

**Report History** 

Decision type:	Urgency item?
Non-Key	No

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