

Executive

Carbon Management

1 July 2013

Report of Head of Environmental Services

PURPOSE OF REPORT

This report considers the progress the Council's Low Carbon Management Plan and well as other low carbon related projects.

This report is public

Recommendations

The Executive is recommended:

- (1) To note the achievements of the ongoing delivery of the Carbon Management Plan;
- (2) To note the success of the investment in solar panels on key buildings
- (3) To acknowledge the results of the Energy & Environment Survey;
- (4) To support Cherwell's sign up to the national Climate Local Commitment.

Executive Summary

Introduction

- 1.1 The Use of Natural Resources Group has involved key staff from across the Council such as Regeneration & Estates, Procurement, Leisure Services, IT, Fleet Maintenance, Transformation and Environmental Services. It uses multiple work streams to deliver projects to improve energy efficiency and save energy costs, as outlined in the Council's Low Carbon Management Plan.
- 1.2 The Use of Natural Resources Group is internally focused and it delivers part of Cherwell's Low Carbon Environmental Strategy and the Council's Low Carbon Management Plan.
- 1.3 This report highlights the achievements of the Use of Natural Resources Group which has led to annual carbon reduction of 6.6% in 2010/11, 5.8% in 2011/12 but due to the especially long winter resulted in 2012/13 with a small increase of 1.5%.

- 1.4 Completion of the solar capital scheme with solar arrays on the Kidlington and Gosford, Bicester, Woodgreen, Spiceball Leisure Centres and Bodicote House has had a positive effect on emissions. The arrays and are expected to save £78,000 per year and approximately 180T of CO₂ per year. All solar PV schemes have over performed in terms of expected production from what was initially calculated, and in the case of Bodicote House by around 20%.
- 1.5 Resident's opinions on issues concerning the environment such as climate change and energy have been ascertained in 2012/13 for the first time through the Energy & Environment Survey. The results and expectations of residents are outlined in this report.
- 1.6 One Planet Living is a positive vision for a sustainable future in which we live happy healthy lives within the natural limits of the planet. Developed by the environmental charity BioRegional, it is underpinned by the science of ecological footprinting and is structured around ten principles: transport, materials, food, water, land use and wildlife, culture and community, equity and local economy, health and happiness, as well as zero carbon and zero waste. The One Planet Living approach and ten principles framework are a simple way to plan, deliver, monitor, communicate and mainstream sustainable development and the green economy. .
- 1.7 BioRegional is currently supporting Cherwell District Council in delivering a range of projects in Bicester to demonstrate mainstream sustainability across the town. This includes a programme of energy saving assessments, retrofits and open days for local homes (Bicester Green Deal), a business development project with local firms Zeta and Carnego, and an innovative energy-saving refurbishment of the Garth building. A2 Dominion's NW Bicester Exemplar project has also recently been endorsed by BioRegional as a One Planet Community, one of only six developments worldwide to achieve this benchmark.
- 1.8 Climate Local is an initiative which was launched in 2012/13 by the Local Government Association in partnership with other national organisations including the Environment Agency. Climate Local replaces the Nottingham Declaration, which was launched in 2000 and signed by Cherwell. The aim of Climate Local is to help drive and support council action to reduce carbon emissions and develop resilience to the effects of a changing climate and extreme weather. Climate Local has strong central government backing and is a key part of the Memorandum of Understanding between the LGA and government

Proposals

- 1.9 To continue building on the successes of the Use of Natural Resources Group by improving the Council's energy efficiency performance into 2013/14 in line with the Council's Low Carbon Management Plan and its Low Carbon Environmental Strategy.
- 1.10 To strengthen residents' and stakeholders' engagement in the climate change and energy efficiency agenda as requested by residents through the Energy & Environment survey, by exploring the adoption and implementation of a One Planet Living approach for the activities of the Council and its partners. Furthermore, to repeat the Energy & Environment survey at the end of

2013/14.

- 1.11 To acknowledge and support the actions of the Climate Local commitment as part of the Oxfordshire Environment and Waste Partnership.

Conclusion

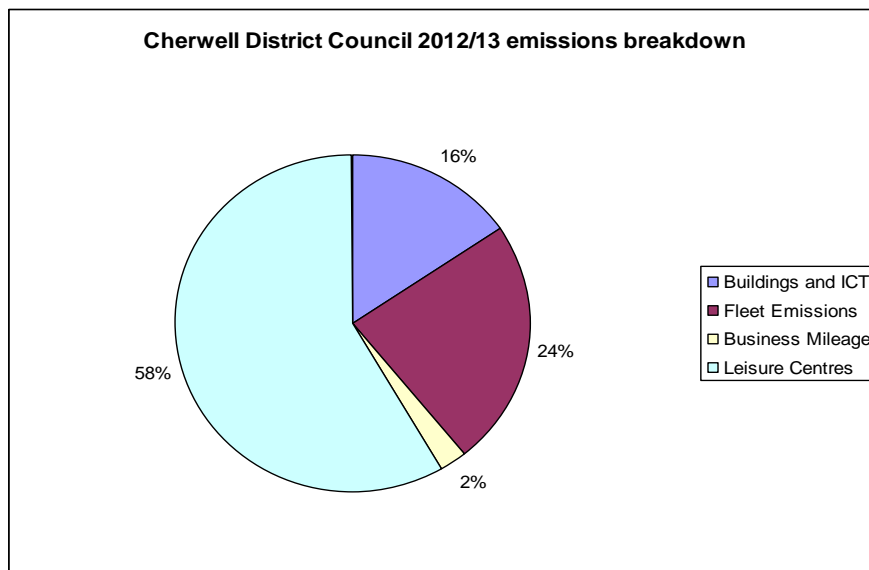
- 1.12 A co-ordinated cross-service approach is employed to take action, to drive forward, support the Use of Natural Resources project and Cherwell's Carbon Management Plan reducing 22% of its carbon emissions by 2014/15 against a 2009/10 baseline.
- 1.13 Annual targets of the Council's Low Carbon Management Plan and actual performance in order to achieve the overall 22% reduction target are outlined below:

	2010/11	2011/12	2012/13 adjusted	2013/14 adjusted	2014/15 adjusted
Annual Target %	-4	-6	-4.5	-5.6	-4.5
Performance %	-6.6	-5.8	+1.5		

(Performance data for 2010/11 and 2011/12 has been changed in line with Department of Energy and Climate Change guidance, please see 2.7)

Background Information

- 2.1 The main sources of Cherwell District Council's operations emissions today are the Leisure Centres, Fleet emissions ,Buildings & ICT and Business mileage:



- 2.2 The Low Carbon Environmental Strategy 2012 is divided into three main sections “Leading by Example”, “Sustainable Communities – Our district – Our future” and “Working in Partnership and encouraging low carbon initiatives” and also includes an action plan. “Leading by Example” outlines the Council’s ambitions target to be working towards a low carbon future as outlined in its Corporate Plan 2012/13 as well as its four strategic priorities.
- 2.3 The main focus of the “Leading by Example” section is on the Council’s Low Carbon Management Plan and its target to reduce emissions by 22% by 2014/15 from a 2009/10 baseline of 5483t CO₂. With energy costs rising, it is essential that efficiencies are adopted to reduce these costs. With a 22% reduction target in emissions Cherwell District Council energy costs will be significantly reduced to just over a £1,000,000 worth of savings over 5 years.
- 2.4 The table below outlines the carbon performance to date:

Tonnes of CO ₂					2012/13	2012/13
	2012/13	2011/12	2010/11	2009/10	% from 2009/10	% from 2011/12
Buildings and ICT	763	726	846	1008	-24.3%	5.1%
Fleet Emissions	1150	1106	1118	1368	-16.0%	3.9%
Business Mileage	122	121	130	125	-2.5%	0.8%
Leisure Centres	2854	2853	3030	2982	-4.3%	0.0%
total	4888	4806	5123	5483	-10.9%	1.7%

Use of Natural Resources Group

- 2.5 In 2009 the Use of Natural Resources Group, was formed from an existing Energy Efficiency Taskforce. Seven ongoing work streams were identified, and each work stream lead was required to devise a work package specifying the tangible outcomes and delivery dates for their area.
- 2.6 The seven work streams and their overall objectives are as follows;
- Leisure centre energy use – ongoing partnership work with Parkwood Leisure to make changes to plant and equipment and in house management systems to reduce CO₂ emissions
 - Property improvements – addressing any sub-standard energy performance in the Council’s buildings and identifying a programme of improvements
 - Technology enhancements – addressing the high energy consumption of computers and servers
 - Fleet use optimisation – achieving fuel reduction targets
 - Sustainable procurement strategy – implementing the strategy and ensuring that sustainability forms a key part of procurement activities

- Workplace travel plan – assessing staff travel patterns and devising a plan aimed at reducing non-sustainable methods of travel
- Culture change and best practice – engaging staff across the Council to embed good practice and share successes
- Communications – engage and inform staff as well as external audiences on main successes of the Use of Natural Resources Delivery Group.

Review of 2012/13 Performance

- 2.7 In line with the Department of Energy and Climate Change guidance we have updated our historical emissions with the new carbon emissions factors for those years, these emissions factors can take up to 2 years to finalise due to their complexities on a UK scale. As a result our previous performance has changed and is summarised by the table in 1.13, with significant reductions in 2010/11 and 2011/12 but an increase of 1.5% in 2012/13. Overall we have a reduction of 10.9% against the baseline, this is a little way behind the planned reduction of 13%.
- 2.8 There are several reasons for this under performance. Primarily this winter has been colder for longer than usual and we have used more gas for heating than expected, the solar PV projects were delayed due to the changes in the feed in tariffs and the subsequent reanalysis of each scheme, changes and reduction in staff for both the Environment and facilities teams have led to projects being delayed.
- 2.9 In 2013/14 the Use of Natural Resources Group aims to deliver 5.6% of energy savings in line with Council Carbon Management Plan target for 2013/14, this includes the original 4.5% target identified last year and also the additional deficit from last year's underperformance.

2012/13 Main Achievements of the Use of Natural Resources Group and outlook for 2013/14

- 2.10 Completion of the solar capital scheme 2011/12 with solar arrays on the Kidlington and Gosford, Bicester, Woodgreen, Spiceball Leisure Centres and Bodicote House. Despite the reduced rate of Feed in tariff (generating income) as a result of government cutbacks the energy savings have made up for the deficit and are expected to save £78,000 per year and approximately 180T of CO₂ per year. All solar PV schemes have over performed in terms of expected production from what was initially calculated, in some cases up to 20% (Bodicote House).
- 2.11 Procurement exercise for the delivery of a biomass boiler for Bicester Leisure Centre has been completed and the contract has been awarded with the aim to start buildings works in July. Furthermore, a joined procurement exercise for the supply of woodfuel for Old Bodicote House, Thorpe Lane depot and the biomass boiler at the Bicester Leisure Centre has been competed and awarded. It is anticipated the Bicester Biomass boiler will attain significant savings and help enable us to make up this years deficit.
- 2.12 Although Fleet emissions increased this year, this has been largely due to the poor weather and the resultant catch up waste collections. Fleet use optimisation has continued to minimise fuel consumption in addition to the procurement of new fuel efficient vehicles, an 'intelligent driver' training and

the rounds review seeking optimum efficiency from the use of vehicles and staff time.

- 2.13 With the introduction of a government grant of 25% of the purchase price of electric vehicles fleet use has decided to trial an electric van for Environmental Services and set up three electric charging points for the council's vehicle fleet (Thorpe Lane depot, Highfield depot / Bicester and Bodicote House).
- 2.14 T5 energy saving lights have been installed in Bicester Leisure Centre to increase further energy savings (funded through the Council's Energy Efficiency Fund) and an energy saving light project is currently developed for Bodicote House car park.
- 2.15 IT plans to replace several high energy usage projectors with LED – projectors saving energy costs and using the Council's Energy Efficiency Fund as a funding source.
- 2.16 Banbury Museum won Arts Council Strategic Support funding, for a Museum sustainability project. The successful application, submitted on behalf of 4 museums in the region, will fund a new energy efficiency and carbon reduction survey and £10,000 to implement the recommendations for Banbury Museum.
- 2.17 A comprehensive communications plan has been developed covering each of the areas. To further promote energy efficiency through behaviour change internally as well as externally articles are planned for In Brief, Cherwell LINK and in some cases press releases will be drafted.
- 2.18 Energy audits will be delivered for Bodicote House and Spiceball Leisure Centre to deliver further recommendations and lay the groundwork for capital bids in order to achieve the 2014/15 target.

Community Engagement & the Energy and Environmental Survey 2012

- 2.19 The emissions from households and businesses are considerably greater than those of the Council. Hence some resource is used encouraging residents to take actions by providing information at all recycling shows and encouraging residents to consider switching electricity supplier to reduce their bills. The recent Collecting Switching exercise had over 850 householders expressing an interest in changing supplier
- 2.20 In 2012 the decision was made to evaluate resident's opinions regarding the Environment and Energy in a separate Energy & Environment Survey. In November 2012 the survey was launched and sent to all members of the citizens panel (1,367). 521 completed and returned the questionnaire.
- 2.21 Questions centred on current behaviour & attitudes regarding limiting climate change & improving energy efficiency with the aim to assess the opinion residents in Cherwell have.
- 2.22 A summary of the results showed that 67% of residents in Cherwell are concerned about the impact of climate change on their area with 80% of residents considering themselves environmentally friendly and doing quite a few environmentally friendly things. Asked what residents are prepared to do

the top answers were to use smart meters, consider switching energy suppliers, using renewables, buy more local food and buy reusable and refillable products.

2.23 With regard to the Council's role - 90% agree that the council should reduce its energy usage, 81% say the council has to play a role in limiting climate change, 75% of residents feel they have a role to play to reduce their carbon footprint. 55% of residents are more interested in the effect their energy usage would have on climate change, than the potential money it would save.

2.24 Asked what residents would expect the Council to do to limit climate change the most popular answers: work with businesses to become more environmental friendly (71%), ensure to purchase sustainable products (71%), work with Leisure providers to reduce energy consumption (62%), work with Fleet to reduce fuel consumption (62%) offer advice to residents on website (60%), work with community groups, parish and town councils to reduce energy use (60%) and offer advice to residents at roadshows and events (58%).

2.25 To respond to residents' requests we intend working with the environmental charity BioRegional to explore the opportunities for One Planet Living in Cherwell as a whole. The Council and BioRegional have a strong track record of successful partnership in engaging with residents and stakeholders, developing innovative projects, securing substantial funding, and delivering sustainable outcomes - particularly with respect to energy and particularly in Bicester. There is considerable scope to broaden the partnership activities to include more of the 'One Planet Living' principles (for example, local economy, food, and transport), and to extend it to other parts of the district.

Climate Local Commitment

2.26 Climate Local is an initiative which was launched this summer by the Local Government Association in partnership with other national organisations including the Environment Agency. Cherwell has signed Climate Local as part of the Oxfordshire Environment and Waste Partnership.

2.27 Climate Local replaces the Nottingham Declaration, which was launched in 2000 and signed by Cherwell. The aim of Climate Local is to help drive and support council action to reduce carbon emissions and develop resilience to the effects of a changing climate and extreme weather. Climate Local has strong central government backing and is a key part of the Memorandum of Understanding between the LGA and government.

2.28 Signing up to Climate Local involves a four-stage process:

Declare targets and action: the next step is to set out – within 6 months, the commitments the partnership intends to make.

Share learning and experiences: the partnership will be expected to share practice with other organisations, communities and stakeholders.

Report on progress: the partnership will be asked to share progress on commitments once a year.

2.29 The Climate Local process outlined above reflects closely the work of the Environment and Waste Partnership, in which good practice is shared and published, and regular progress reports are submitted to the Oxfordshire Partnership. The partnership has already signed up to targets and priorities in

Oxfordshire 2030, about which it provides regular reports. This means that there would be no extra work required to develop new targets; targets submitted to Climate Local would be those which have already been agreed within the Oxfordshire 2030 framework. Furthermore, the actions of Climate Local have been incorporated into the action plan of Cherwell's Low Carbon Environmental Strategy.

- 2.30 The added value of this initiative is the opportunity to raise the profile of our work in Oxfordshire by sharing practice with other local authorities and partners at a national level, and benefit from additional resources and opportunities for peer learning. Participation in Climate Local, would not require new targets to be developed, but could provide an additional stimulus for the Partnership to commit to some more specific and measurable actions which demonstrate progress in delivering its priorities.

Key Issues for Consideration/Reasons for Decision and Options

- 3.1 The Low Carbon Environmental Strategy is key to reducing energy costs and emissions along with the Carbon Management Plan
- 3.2 The work already achieved by the Use of Natural Resources Group needs to continue to deliver the Carbon Management Plan
- 3.3 Key to the internal and external environmental work of the council is to understand residents' opinions and expectations regarding climate change and energy efficiency and to engage with them.

The following options have been identified. The approach in the recommendations is believed to be the best way forward

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|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Option One | To approve the forward plan for the Use of Natural Resources Group for 2013/14, to note the results of the Energy & Environment Survey and to support Climate Local |
| Option Two | To reject either all or some of the proposals under Option One |
| Option Three | To ask officers to modify either all or some of the proposals under Option One |

Consultations

Use of Natural Resources Group

- Public Consultation** Through a Energy & Environment survey

Implications

- Financial:** The energy bills for the Council can be significant by taking action to reduce energy usage costs can be kept under control.
Comments checked by Joanne Kaye, Management Accountant 01295 221545
- Legal:** There are no direct legal implications with this report. The actions taken and proposed to be taken all contribute to the Government's targets to reduce carbon emissions pursuant to the Climate Change Act 2008.
Comments checked by Kevin Lane, Head of Law and Governance 0300 0030107
- Risk Management:** A Cleaner Greener Cherwell is one of the four strategic priorities of the Council and increasing energy efficiency and reducing CO2 emissions is a key component. Meeting the Carbon management plan is important to maintain the reputation of the council.
Comments checked by Claire Taylor, Corporate Performance Manager 01295 221563

Wards Affected

All

Corporate Plan Themes

A Cleaner Greener Cherwell

Lead Member

Councillor Nigel Morris
Lead Member for Clean & Green

Document Information

Appendix No	Title
1	Climate Local agreement
2	Environmental Survey 2012
Background Papers	
None	
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