Meeting: Executive

Date: 2 November 2010

Subject: Carbon Management Plan

Report of: Cllr Tom Nicols - Portfolio Holder for Sustainable Development

Summary: The report proposes the adoption of the Carbon Management Plan,

which proposes specific actions to reduce the Council's own carbon

footprint.

Advising Officer: Gary Alderson, Director of Sustainable Communities

Contact Officer: Stephen Mooring, Corporate Policy Advisor (Climate

Change/Sustainability)

Public/Exempt: Public

Wards Affected: All

Function of: Executive

N/A

Key Decision Yes

Reason for urgency/ exemption from call-in

(if appropriate)

CORPORATE IMPLICATIONS

Council Priorities:

Taking positive and proactive steps to tackle climate change by reducing the Council's carbon footprint demonstrates leadership and contributes to the delivery of the all the Council's priorities, particularly in relation to managing growth effectively.

Financial:

Failure to take action will leave the Council vulnerable to significant costs later, both in inefficiencies in dealing with climate change and in fines.

In 2009 Ofgem also predicted a 60% price rise for energy by 2016. Based on the Council's and schools current combined energy spend of £3.4 million per year, by 2015 this would represent an increased combined energy bill of up to £4.6 million rising as high as £5.4 million by 2016.

The Carbon Management Plan (CMP) explores the impact of this in more detail and shows that the estimated cumulative cost to the Council of taking no action compared to delivering a 60% CO₂ reduction over the next ten years is £76 million. This is primarily through increased energy and fuel bills for our buildings, schools and outsourced services. This figure is based on a comparison of the Council taking a 'business as usual' approach - where no investment is made in carbon reduction measures against the savings generated from measures taken to achieve the specified target. These financial estimates also consider the impact of a conservative estimate for the predicted price rises in energy and fuel bills.

The Council will be subject to the Carbon Reduction Commitment (CRC) which will cost the Council approximately £300k p.a. from April 2013 (included in the medium term

financial strategy). Depending on the levels of reduction in CO₂ emissions achieved the Council may be entitled to reward payments which will offset part or potentially all of this sum, these would be received from October 2013 onwards.

The CMP details a number of existing projects and opportunities for future carbon reduction and energy efficiency measures. When <u>fully</u> implemented it is estimated that the existing projects will deliver £350k in energy efficiency savings. It is also estimated that the carbon reduction opportunities identified in the CMP could deliver savings in the region of £443k per annum in energy and fuel costs (based on current energy and fuel prices) split between the Council (£164k) and schools (£279k).

The initial estimated cost of implementing these opportunities is the region of £715k, the costs of which are £135k for the corporate estate and £580k for measures in schools (to be funded by schools). Some of these opportunities will meet the requirements for capital funding. Detailed business cases will be put together to support a bid to these funds. The Council will also explore other funding opportunities; including Feed in Tariffs and Energy Performance Contracting agreements.

Accessing external funding or grant schemes has been made even more difficult by the closure of several grant schemes, such as Salix and the Low Carbon Buildings Programme, which would have provided valuable additional external funding to implement some of these measures.

The CMP details a hierarchy of actions on which the opportunities detailed in the CMP will be progressed.

Legal:

The Climate Change Act (2008) implements the CRC Energy Efficiency scheme which the Council will be legally required to register to participate from April 2011. CRC has strict financial and legal penalties for organisations and the nominated lead individuals who fail to participate or maintain accurate supporting evidence.

Risk Management:

Failure to take action on this agenda will present the Council with financial risks, primarily through the increase in fuel costs and impact of the CRC scheme along with the reputational risk of not dealing with impacts of climate change.

Staffing (including Trades Unions):

If the Council is to achieve a reduction in its carbon footprint, staff and members will need to be involved and act. Some of the measures to deliver this could involve staff working differently, e.g. through making use of tele and video conferencing to reduce car journeys or ensuring that they take small no cost measures, such as turning equipment and lights off, which cumulatively make a significant contribution.

Based on best practice from other local authorities targeting staff with a robust green awareness campaign could reduce energy use in the Council's buildings by up to 5%, which equates to a saving of £35,000 per annum (not including Schools).

Equalities/Human Rights:

Compliance with equality legislation has a direct impact on a Council's ability to deliver against the sustainability agenda, of which climate change is a major element. Issues such as economic development, sustainable communities, quality of life and community cohesion are all factors which can be influenced by an individual's experience of inequality and discrimination.

These factors were highlighted by the findings of the Equality Review (commissioned by the Cabinet Office in 2006/07) which collected and analysed a wide range of evidence on inequality and concluded that the prosperity and cohesion of all communities are

affected by differences in identity (for example gender, ethnicity and disability) and other factors such as changes in social mobility, migration and socio-economic conditions.

The actions taken to implement the Climate Change Strategy, particularly those relating to cutting the Central Bedfordshire area's carbon footprint and preparing for the impacts of a changing climate will need be carried out in an inclusive manner. They will benefit those suffering from inequalities, for example domestic energy efficiency work will be targeted at households suffering from fuel poverty and measures taken to mitigate against the impacts of a changing climate – such as extreme weather events and heat waves - protecting the elderly and vulnerable.

Community Safety:

None

Sustainability:

The key principles of sustainability are living within environmental limits, ensuring a strong, healthy and just society, and achieving a sustainable economy. The Carbon Management Plan (CMP) will deliver on, or link strongly to, the Council's response to these principles. The CMP will provide the main guide to ensure that the Council operates within its environmental limits and leads by example – particularly in relation to carbon emissions and energy and fuel efficiency.

Summary of Overview and Scrutiny Comments:

Overview and Scrutiny have not considered this report.

RECOMMENDATION(S):

That the Executive considers and approves the Carbon Management Plan attached at Appendix A

Reason for Recommendation(s):

So that the Council:

- Realises the potential efficiency savings from taking action to reduce its carbon footprint.
- Takes measures to protect itself from the future impact of energy price increases over the next ten years.

Fulfils the legislative requirements placed on it in the Climate Change Act (2008) and is in a position to perform well in the CRC energy efficiency scheme.

Executive Summary

In June 2010 full Council adopted the Climate Change Strategy. The implementation of the Strategy will be overseen by three action plans, these being:

- The Carbon Management Plan focusing on reducing the Council's own carbon footprint.
- The Local Area Emissions Reduction Plan focusing on reducing CO₂ emissions from the Central Bedfordshire area.
- The Climate Change Adaptation Plan focusing on the necessary action required to protect the Council and Central Bedfordshire area from the impacts of the changing climate.

This paper focuses on the first of these plans, the Carbon Management Plan (CMP), and details the key elements of the plan, how it will be used to drive forward improved performance in relation to carbon reduction and climate change, and how the opportunities identified within could potentially be financed.

Introduction

- 1. Like all other local authorities, Central Bedfordshire Council has a key role to play in mitigating climate change both as a community leader and through the services we provide. The Council is also a considerable consumer of energy and a direct source of carbon dioxide (CO₂) emissions through our activities and buildings. The Council will therefore need to implement a robust plan to realise the efficiency savings associated with tackling this issue, and, as a result demonstrate leadership to local businesses and residents in our area so that they themselves take carbon reduction measures.
- 2. Aside from the moral and environmental case for taking action to tackle climate change there is a significant opportunity for the Council to reduce costs and operate more efficiently by embracing this agenda alongside a number of other compelling drivers:
 - the considerable scope for efficiency and cost savings;
 - the future impact of the increase in energy and fuel prices, and;
 - the requirements of the Climate Change Act (2008), including the Council's compulsory participation in schemes such as the CRC energy efficiency scheme and Display Energy Certificates (DEC's).

Our work to date

- 5. In May 2009 the Council was chosen, amidst strong competition, to take part in the Carbon Trust's local authority carbon management programme (LACM). Inclusion in this programme has given the Council access to free technical support and expertise from the Carbon Trust to identify and explore carbon reduction opportunities, and to assess the future impact of not taking action. This work has been used to compile the CMP (see Appendix A).
- 6. The Council's work on climate change to date has been built on the excellent progress made by the legacy authorities. This has focused on the following core areas of activity:
 - i) Compiling the Council's carbon footprint and identifying and considering opportunities to reduce it;
 - Understanding the positive contribution of existing projects to this agenda, such as the Council's Streetlighting Strategy and Medium Term Accommodation Strategy;
 - iii) Identifying future opportunities for carbon reduction measures and exploring potential funding models to implement these.

All of these aspects are covered in detail in the CMP.

The Council's carbon footprint

7. To understand the main sources of CO₂ emissions from the Council a carbon footprint was complied. The Council's carbon footprint is 33,700 tonnes (2008/09 baseline) and shows schools to be the biggest contributor to emissions (51%). A detailed breakdown is given in the CMP (see Appendix A). The Council's total spend on energy is in the region of £3.4 million (including

- schools). The combined total spend on energy and fuel for transport, including where services are outsourced, is £7.2 million.
- 8. Work is currently underway to compile and calculate the Council's carbon footprint for our first year of operation 2009/10. This will be used to demonstrate progress, highlight key areas for action and provide transparency of the Council's performance in this area.
- 9. The Council's carbon footprint will be compiled annually, to allow the performance to be measured annually and also fulfil the Council's requirements to provide information for NI185 CO₂ emissions from LA operations and the CRC Energy Efficiency Scheme.

The key aspects of the Carbon Management Plan

- 10. The CMP (appendix A) explores the following areas and their implications for the Council:
 - i) The Council's emissions baseline and projections for the future.
 - ii) The financial implications for the Council of not taking action, especially in relation to increasing fuel and energy prices.
 - iii) Options to be investigated to finance carbon reduction measures, including exploring innovative ways of securing investment from the private sector.
 - iv) Estimated CO₂ and financial savings from existing projects already being implemented.
 - v) Potential carbon reduction opportunities to be explored further, including estimates of financial and CO₂ savings, along with initial estimated costs to implement.
 - vi) Actions required to embed the principles of sound carbon management into how the Council operates.

Options for financing the Carbon Management Plan

- 11. The opportunities identified in the CMP will be explored further, with the business case developed subsequently. Various options for funding will be pursued as relevant, including bidding for capital funding as appropriate. It is accepted that the opportunities that are implemented and funded will need to demonstrate clear financial benefits and deliver efficiencies for the Council.
- 12. To reduce the burden of the funding streams detailed above, the Council will also explore other avenues to fund the opportunities identified in the CMP. It is acknowledged that this task has been made even more difficult by the closure of several core funding streams, such as Salix and the Low Carbon Buildings Programme, which would have provided valuable additional external funding to implement many of these measures.
- 13. The CMP proposes that the Council therefore explore alternative funding models for carbon reduction measures, these include:
 - i) Energy Performance Contracting (EPC): This is a results driven partnership agreement between a client and an energy services company (ESCO) that overcomes the need for up front investment from the client. Under the terms of an EPC the ESCO implements a programme of practical engineered improvements to the client's estate.
 - ii) Feed-in Tariffs (FITs): FITs became available in the UK on 1st April 2010. Under this scheme energy suppliers make regular payments to householders and communities who generate their own electricity from renewable or low carbon sources such as solar electricity (PV) panels or

wind turbines. FITs provide a guaranteed financial return on investment and as a result a large number of private sector companies are willing to 'rent' roof space to install PV panels. In return they usually offer the green electricity generated at a discounted or fixed price for set period of time.

Conclusion and Next Steps

- 14. i) The Council will face further financial burdens in the coming years from the predicted increase in the unit cost of energy and also through the Council's compulsory participation in the Carbon Reduction Commitment scheme.
 - ii) The only way to protect the Council from the future financial impact of these is to reduce energy use (and therefore carbon emissions). Work with the Carbon Trust identifies the cumulative financial cost over the next ten years of taking no action compared to putting in place measures to achieve a 60% reduction in the Council's carbon footprint by 2020 totalling £76 million.
 - iii) The next steps include:
 - Completion and analysis of the Council's carbon footprint for 2009/10.
 - Ensuring that sufficient energy management expertise is incorporated in to the new property management arrangements post Mouchel.
 - The development of the business cases for the opportunities identified and implementation of those measures that meet the Council's requirements for efficiency savings.
 - Exploring the alternative funding models and assessing suitability for the Council's requirements.
 - Instigation of the School's Forum sub-group for Asset Management which will oversee the implementation of a School's carbon reduction plan. Initial activity to support this includes energy audits of the ten largest energy using schools.

Appendices:

Appendix A – Carbon Management Plan

Background Papers:

The following tools from the Carbon Trust support the formulation of the Climate Change Strategy and Carbon Management Plan:

- Carbon footprint tool for Central Bedfordshire Council 2008/09
- o Rapid Assessment of Potential (RAP) Tool
- o Carbon Management Plan Register of projects
- Quantification crib sheet

Location of papers:

Papers are held electronically or in hard copy at Technology House, Bedford.