

## Appendix B

# Central Bedfordshire Council Carbon Management Programme



## Carbon Management Plan (CMP) 2010/11

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## **Foreword from Central Bedfordshire Council**

The impact of a changing climate on the Council and how it delivers services is a key challenge. The Council acknowledges the importance of taking action now in order to reduce harmful CO<sub>2</sub> emissions and to ensure that Central Bedfordshire is well equipped to cope with inevitable climate change in years to come.

Opportunities to be part of the Carbon Trust's Local Authority Carbon Management Programme are limited, and the Council's success on this scheme should be seen as a vote of confidence in the Council's ability to address this issue.

This document, the Council's first Carbon Management Plan (CMP), will deliver the aspects of the Council's Climate Change Strategy that relate to reducing our own organisation's carbon footprint. Many of these measures will not only contribute to the global effort to reduce CO<sub>2</sub> emissions but also help the Council to operate more efficiently, cut costs and go some way to protecting us from the inevitable future increases in fuel and energy costs.

The Council is already working hard to reduce its CO<sub>2</sub> emissions and we have set a challenging target of a 60% reduction in emissions from Council activities and operations by 2020. We are also working proactively with our partners on climate change projects and to ensure that we can all benefit from the considerable financial savings to be made through being more energy efficient.

**Cllr Tom Nicols, Portfolio Holder for Sustainable Communities**



## Foreword from the Carbon Trust

Cutting carbon emissions as part of the fight against climate change should be a key priority for local authorities - it's all about getting your own house in order and leading by example. The UK government has identified the local authority sector as key to delivering carbon reduction across the UK in line with its Kyoto commitments and the Local Authority Carbon Management programme is designed in response to this. It assists councils in saving money on energy and putting it to good use in other areas, whilst making a positive contribution to the environment by lowering their carbon emissions.

Central Bedfordshire Council was selected in 2009, amidst strong competition, to take part in this ambitious programme. Central Bedfordshire Council partnered with the Carbon Trust on this programme in order to realise vast carbon and cost savings. This Carbon Management Plan commits the council to a target of reducing CO<sub>2</sub> by 35% by 2015 and 60% by 2020 and underpins potential financial savings to the Council of around £1.3 million.

There are those that can and those that do. Local authorities can contribute significantly to reducing CO<sub>2</sub> emissions. The Carbon Trust is very proud to support Central Bedfordshire Council in their ongoing implementation of carbon management.

A handwritten signature in black ink, appearing to read "Richard Rugg".

Richard Rugg

Head of Public Sector, Carbon Trust





## Management Summary

### What is the Carbon Management Plan (CMP)?

Like all other local authorities, Central Bedfordshire Council has a key role to play in mitigating the effects of 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 CO<sub>2</sub> emissions arising from our activities and buildings.

This Carbon Management Plan details how the commitments made in the Climate Change Strategy relating to cutting the Council's own carbon footprint and reducing energy and fuel use from the Council's estate, schools, fleet and services it provides will be delivered. It will also capture the action being taken by our main outsourced service providers in areas such as highways, leisure and waste collection.

The implementation of the CMP will be programme managed by the Climate Change Management Board (CCMB). As an implementation plan this is a 'live' document, so the projects detailed in it will be regularly reviewed and amended or added to as appropriate. This will be done via the CMP register (CMPR).

The CMP itself will be refreshed annually to ensure that it remains up to date and a fit for purpose plan for the Council to reduce its carbon footprint and achieve the ambition set out in the Climate Change Strategy.

### The target

This CMP details how the Council will approach reaching the target set in the Council's Climate Change Strategy for cutting carbon emissions for our estate, schools, fleet, operations and where services are outsourced to other organisations.

#### Cutting the Council's carbon footprint

The medium and long term targets for cutting the Council's own carbon footprint from the 2008/09 baseline are:

- Achieve a **35%** reduction in the Council's carbon footprint by 2015; and
- Aim to achieve a **60%** reduction in the Council's carbon footprint by 2020.

### The baseline

The baseline year from which future progress will be measured is 2008/09. The Council's total carbon emissions for this period from its estate, schools, street lighting, business travel, fleet and where services are outsourced to third parties is 33,700 tonnes.

A breakdown of the Council's carbon footprint can be found on page 14 of this document.



## The financial implications

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

- The estimated cumulative cost to the Council of taking no action compared to delivering a 60% CO<sub>2</sub> reduction over the next ten years is £76 million (see pages 16 to 18).
- This is based on a 'business as usual' approach where no investment is made in carbon reduction measures, whilst also taking into account the impact of predicted price rises in gas and electricity bills. In 2009, Ofgem predicted a rise of up to 60% in the next seven years. Based on current energy consumption the Council would face an increased total energy bill of up to £5.4 million by 2016.
- The Council will be subject to the Carbon Reduction Commitment (CRC) which will cost the Council approximately £300k per annum from April 2011 (included in the medium term financial strategy). Depending on the levels of reduction we achieve the Council may be entitled to reward payments which will offset part or potentially all of this
- The projects identified in the supporting Carbon Management Plan are estimated to deliver annual savings of up to £1.3 million in energy and fuel costs, split between the Council, schools and our major outsourced service providers (such as leisure). This figure includes an estimated £430k in efficiency savings from projects that are already being implemented, such as the Streetlighting Strategy and Medium Term Accommodation plan.
- Potential savings from new projects and opportunities would deliver annually an estimated £850k in savings and cost approximately £1.1 million to implement.
- The future opportunities projects listed in this Carbon Management Plan will require funding in the future; however the current economic climate presents the Council with a considerable challenge to fund some of these measures. The Climate Change Strategy and this CMP details the principles on which the projects could be financed. These include a commitment to explore alternative ways of financing these measures, such as working in partnership with Energy Services Companies (ESCO's) in energy performance contracting agreements.



## Introduction

On the 1<sup>st</sup> April 2009 Central Bedfordshire Council came in to operation, replacing the former local authorities of South Bedfordshire District Council, Mid Bedfordshire District Council and Bedfordshire County Council.

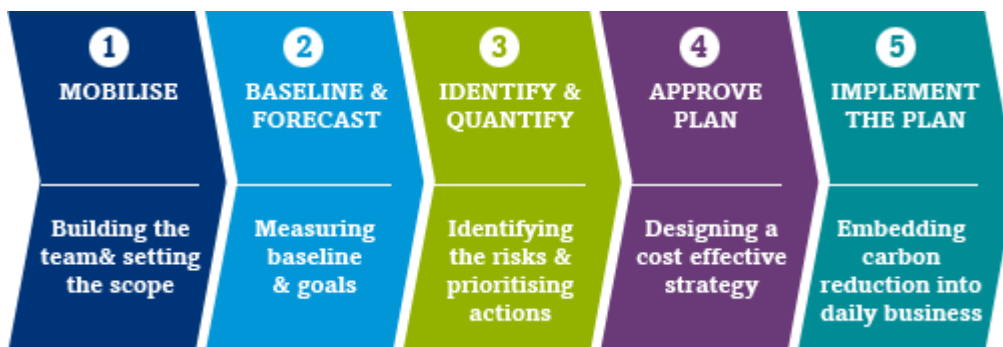
The legacy councils had already started to address the challenges of carbon reduction and climate change and made good progress in the following areas:

- **South Bedfordshire District Council** achieved EMAS accreditation, signed the Nottingham Declaration on Climate Change and had taken a range of energy efficiency measures, including upgrades to lighting in the Dunstable District Offices.
- **Mid Bedfordshire District Council** had also signed the Nottingham Declaration on Climate Change and put in place a Carbon Reduction plan that had achieved a 5% reduction in the Council’s carbon footprint, primarily through energy efficiency measures installed at Priory House.
- **Bedfordshire County Council** had achieved ISO14001 certification for its Environmental Management System, and through a range of measures had reduced the County Council’s carbon footprint by 9.1%. This included the operation of a ‘invest to save’ fund of £360,000, part funded through Salix.

In order to build on the good progress already made by the legacy councils, the Council applied for and was selected, amidst strong competition, to take part in the Carbon Trust’s ambitious Local Authority Carbon Management programme.

This supported the Council through a five stage process from mobilising the organisation to take action, through to implementation of the plan.

**Figure 1: The Carbon Trust’s Five Step Process in the Carbon Management Programme**





The output of this work is this, the Council's first Carbon Management Plan (CMP). The CMP will deliver the aspects of the Council's Climate Change Strategy that relate to reducing the Council's own CO<sub>2</sub> emissions. This will be done by:

- reducing the Council's carbon footprint;
- reducing the Central Bedfordshire area's carbon footprint; and
- Make the Council, our estate, the services we provide, and the Central Bedfordshire area more resilient to the impacts that a changing climate is, and will, have.



## Background to the Carbon Management Plan

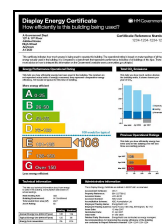
The Climate Change Strategy sets the context and drivers for the Council to take action to reduce our carbon footprint. The Strategy also defines the Council's vision, sets the level of ambition and defines the financial and strategic approach that the Council will take to achieve these.

### Context and drivers for carbon management

The Council is a considerable consumer of energy and a direct source of CO<sub>2</sub> emissions through our activities and buildings. The ambition set nationally to reduce CO<sub>2</sub> levels through the UK's targets, in the Climate Change Act (2008), of 34% by 2020 and 80% by 2050, from a 1990 baseline, places an emphasis on all organisations doing as much as they can to cut emissions – this is being driven forward by a range of mechanisms or drivers for action.

- The Carbon Reduction Commitment (CRC):** From April 2010 the Council will be included in the government's CRC scheme. This is a carbon reduction scheme based around the trading of carbon allowances. In the first year allowances have to be purchased for CRC (April 2011), which are estimated to cost £300,000. The Council will receive an annual payment based on the previous year's performance; this recycles the expenditure made on allowances plus or minus a payment made for good or poor performance. It gives a financial incentive to invest in measures that will increase energy efficiency and reduce CO<sub>2</sub> emissions.
- Comprehensive Area Assessment (CAA):** CAA is the way in which the Council's performance as a local authority is assessed and measured. Part of this considers how well the priorities for action on climate change mitigation are expressed and evaluates the potential for future improvement in this area. This evaluates the Council's management of performance and use of resources, including the delivery of local climate change priorities. The use of resource element specifically investigates whether the Council is using resources efficiently (e.g. energy) to ensure the Council is actively reducing its own carbon footprint.
- The Local Government Performance Framework:** This includes NI185: *Percentage CO<sub>2</sub> reduction from local authority operations*, which relates specifically to carbon reduction. As a result performance in this area will be scrutinised at a far higher level than ever before.
- Display Energy Certificates (DEC's):** As of 1<sup>st</sup> October 2008 there is a legal requirement for all public sector buildings with a total 'useful' floor area of over 1,000m<sup>2</sup>, to show a Display Energy Certificate (DEC) in a prominent place, clearly visible to the public. This means that the energy performance of our core buildings will be open to scrutiny from the public and other interested parties.

The current DEC ratings for some of the Council's main corporate buildings include a G rating for our Dunstable Office and an E rating for Priory House. Through the implementation of the CMP it is envisaged that these ratings will improve and the Council's progress will be demonstrated to the public via the DEC's on display.





There are other drivers for the Council to take action, these are:

- **The potential to make considerable efficiency savings:** Climate change mitigation is ultimately all about using energy and fuel more efficiently, this in turn has considerable scope for financial savings. For example, the Council's annual energy spend is estimated to be in the region of £3,400,000 and makes up approximately 83% of the Council's total emissions.

If energy efficiency is used as the focus of carbon reduction activity, a 10% reduction in the Council's carbon footprint could save £340,000 per annum on energy cost alone.

- **Energy Prices and Carbon Costs:** The energy market is volatile. Energy and fuel costs have seen a dramatic rise in recent years, with energy prices increasing by well over 50% since 2004. This trend is not expected to change with Ofgem recently predicting that consumers could face price rises of up to 60% in the next seven years as energy supplies become more volatile. So we must accept that the price we pay for our energy will continue to increase in the coming years and in parallel with increasing financial penalties for failing to reduce carbon emissions at a sufficiently quick enough rate, through the CRC energy efficiency scheme. These pressures create an undeniable business case for action, with effective carbon management avoiding escalating costs and easing future budget pressures.



## **Vision and strategic approach**

As set out in the Climate Change Strategy, the Council's vision is to deliver a robust, cohesive and actionable response to mitigating and adapting to climate change across the authority and Central Bedfordshire area.

This is underpinned by the Climate Change Strategy's strategic goal to:

Make the Council more efficient in terms of energy and fuel use, and embed carbon reduction into how the Council operates and the services provided, recognising that this will in turn reduce waste and cut emissions.

The Council's strategic approach is based on the following principles:

- Learn from and become an example of best practice.
- Economy and efficiency will be the key drivers for our climate change work.
- Major climate change projects programme managed by CCMB.
- Understanding the risks and opportunities from climate change.
- Considering climate change implications as part of our decision making.
- Being innovative and pushing the boundaries.
- Learning from, working with and supporting our partners.
- Raise awareness and commitment - get ideas and ownership.
- Regular monitoring of our progress and report performance.
- Annual review and refresh/updating.

How these will be applied is covered in more detail in the Climate Change Strategy.



## Targets and objectives

### **Cutting the Council's carbon footprint.**

The medium and long term targets for cutting the Council's own carbon footprint from the 2008/09 baseline are:

- Achieve a **35%** reduction in the Council's carbon footprint by 2015; and
- Aim to achieve a **60%** reduction in the Council's carbon footprint by 2020.

These targets will be delivered through reducing the emissions that are caused by the energy use in the Council's buildings and schools, fuel use from our fleet and staff business travel and outsourced services.

The baseline from which the reductions will be made will be the 2008/09 carbon footprint, as detailed in this CMP.



## **Emissions Baseline and Projections**

### **Scope**

The Central Bedfordshire Council carbon footprint and baseline is based on the 2008/09 submissions made to DECC for NI185: *Percentage CO<sub>2</sub> reduction from LA operations* for the legacy authorities. The Bedfordshire County Council data was split based on ownership of the site, geographic location and the ratio of staff at the site. A 60:40 split was made where none of these were possible.

### **What does it include and what else could it include?**

The carbon footprint includes accurate data for energy use from the Council's estate, operations and schools. It includes the emissions of our major contractors for waste, leisure, highways and property. It includes staff business mileage for all three legacy authorities and a proportion of business travel on public transport.

In future years we will also look to assess and measure CO<sub>2</sub> emissions of Council staff commuting to their place of work, and explore whether there would be a benefit of also including water use and waste from our sites.

### **Baseline**

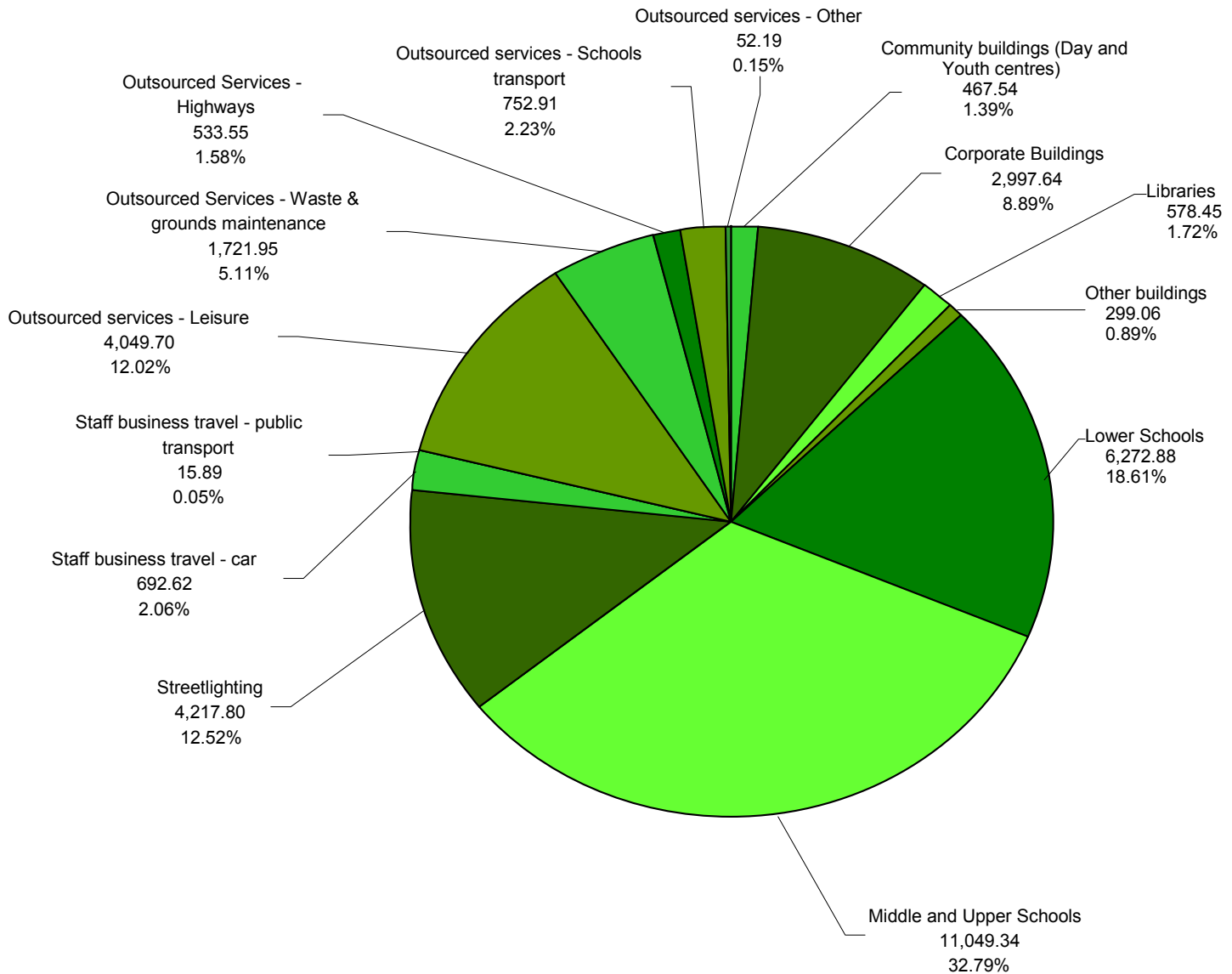
Central Bedfordshire Council's baseline carbon footprint is 33,701 tonnes of CO<sub>2</sub>. This relates to the year 2008/09 and will be used as the baseline from which future performance will be measured. This volume of CO<sub>2</sub> would fill our Priory House offices 107 times and is equivalent to the emissions caused by a plane flying around the Earth's equator 5,860 times.

### **What are the main sources of Central Bedfordshire Council's emissions?**

A full breakdown is given in the pie chart overleaf (figure 2).



**Figure 2: Summary of Central Bedfordshire Council's CO<sub>2</sub> emissions for the baseline year 2008/09** (figures show tonnes of CO<sub>2</sub> and the percentage share of the Council's carbon footprint)



This shows that:

- Currently emissions from schools make up 52% of the carbon footprint and their contribution will be significant in developing and implementing the Climate Change Strategy.
- Emissions from outsourced services make up 21% of the Council's carbon footprint. This highlights the importance of embedding sustainable and low carbon procurement principles into how the Council procures goods and services.
- Leisure Centres make up 12% of the Council's carbon footprint, this is a significant contribution from only six sites (out of a total of 192 including schools).



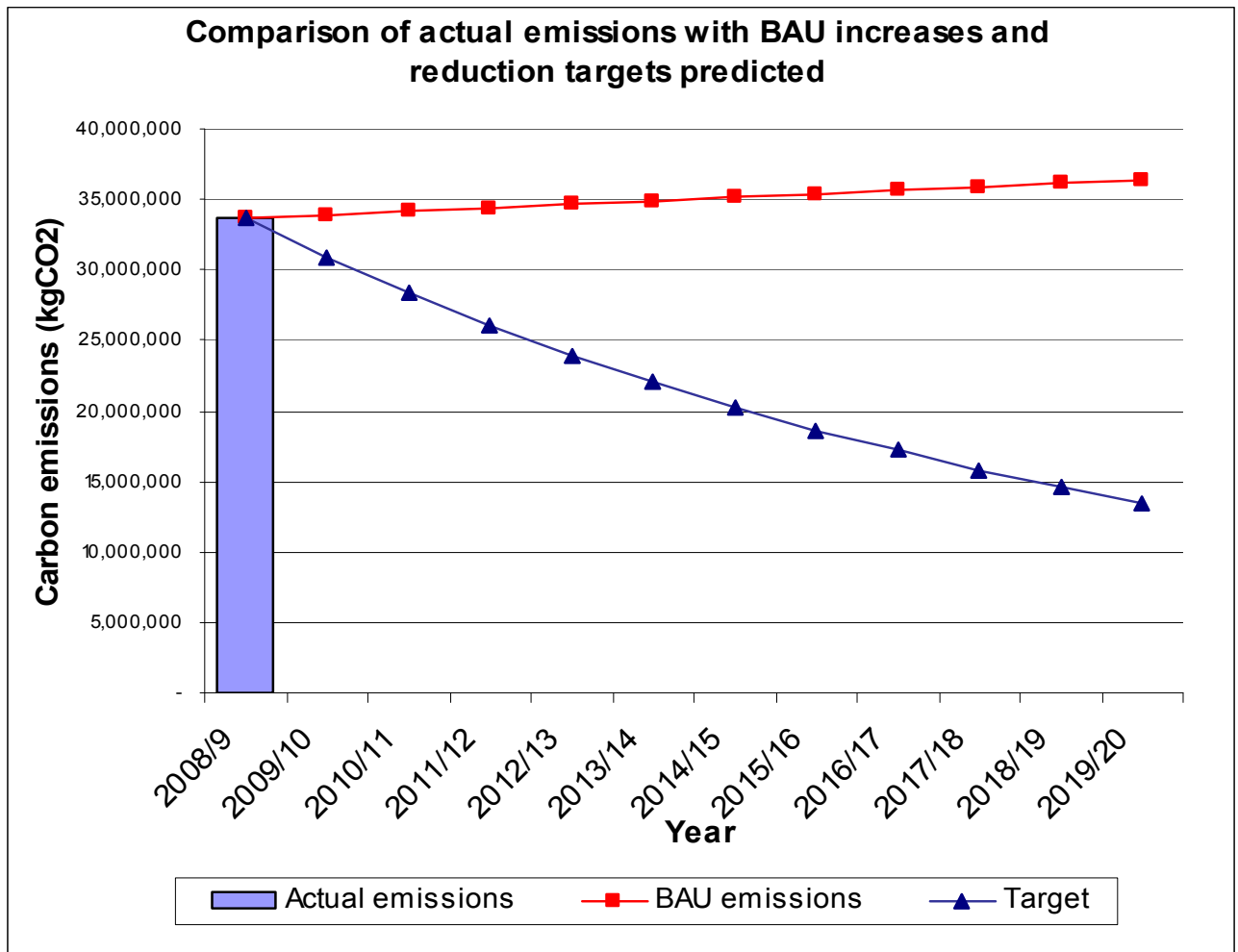
- Street lighting currently makes up 12% of the Council's carbon footprint, however the switch to more efficient LED streetlights and equipment gives the Council good scope to reduce emissions from this area.



### Projections and 'Value at Stake'

The expected level of CO<sub>2</sub> emissions for the next ten years is plotted on the graph below. This takes into account a 'business as usual' approach, through which no action is taken, as well as the projected levels of CO<sub>2</sub> that would result from the implementation of measures to reduce emissions in line with the targets set out in this CMP. This is called that 'Value at Stake' (VAS).

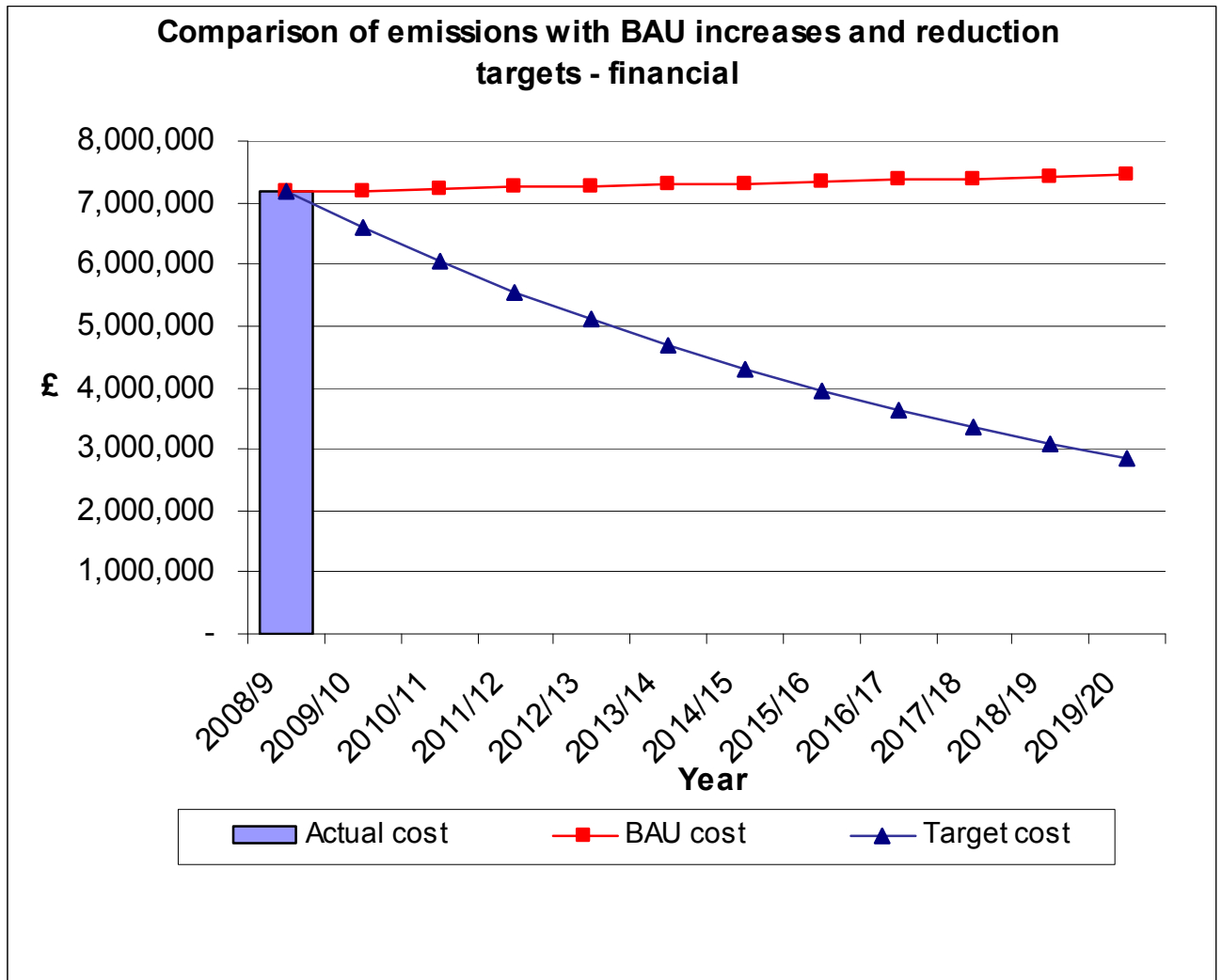
**Figure 3: Projected CO<sub>2</sub> emissions for business as usual (BAU) and reduction target scenarios.**



To get a better understanding of the financial case for action and cost to the Council of not taking action to reduce our carbon footprint the financial VAS has been calculated. This is based on the same premise as the carbon VAS above, and shows that potential savings if energy and fuel prices were to remain constant (with only use increasing by 0.7% per year).



**Figure 4: Projected costs and savings from the business as usual (BAU) and CO<sub>2</sub> reduction scenarios – allowing for the price of fuel and energy to remain at a constant level.**



However, it is very unlikely that we will see no increase in fuel and energy cost over the next ten years. It is estimated that energy costs could increase by 5.3% per year based on a medium price increase scenario from DECC’s energy and fuel price projections. Likewise it is estimated that fuel (petrol and diesel) costs will increase by 8.4% in the same scenarios from DECC.

On all of the graphs the area between the two lines is the Value at Stake – the financial impact (or carbon impact in the case of figure 3) of taking a business as usual approach rather than achieving the carbon reduction targets detailed in this CMP.

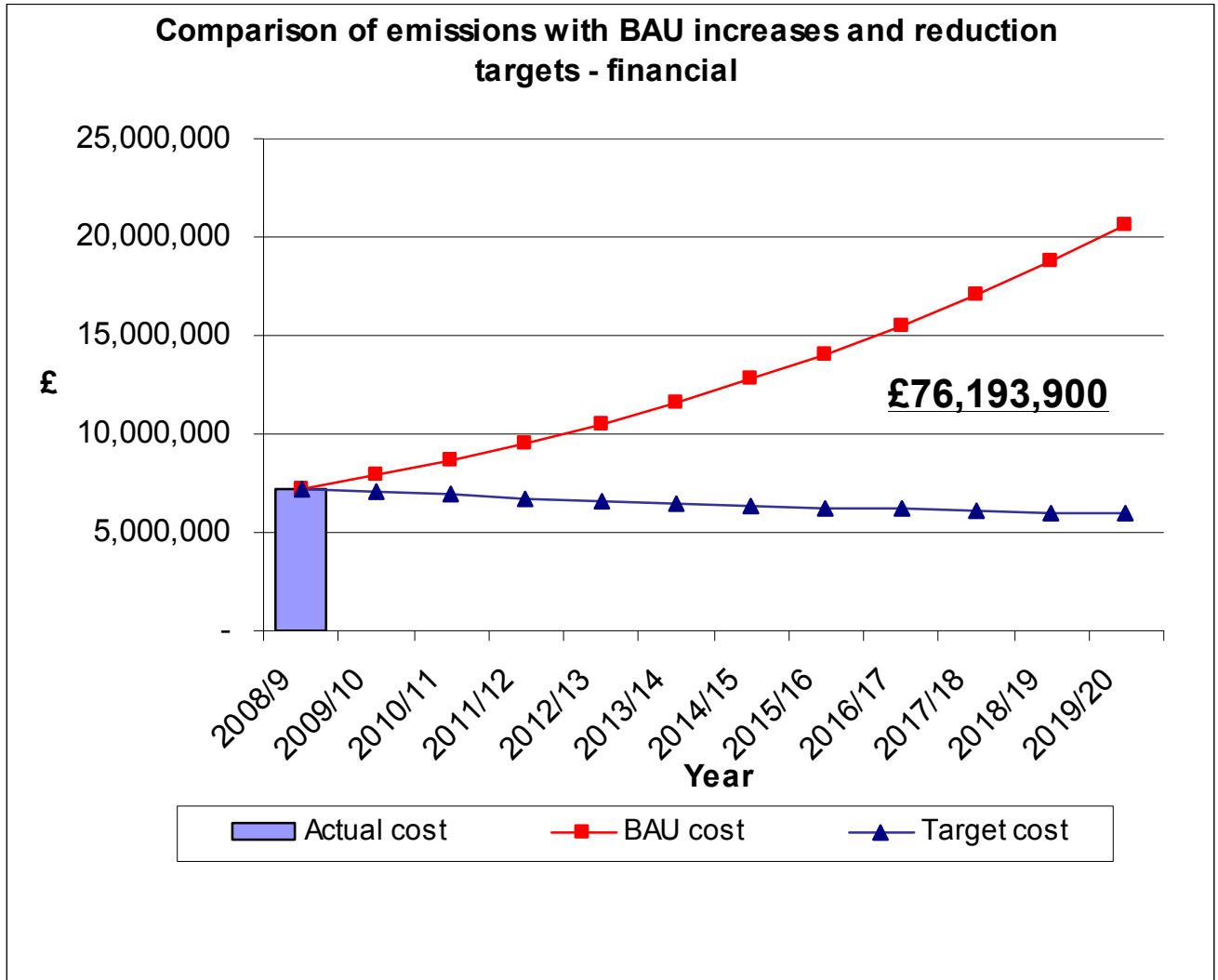
The financial cost does not include the costs of implementing the reduced emissions scenario i.e. buying the new boilers etc.

The difference between these two scenarios represents the financial value of continuing in a business as usual manner (and not cutting carbon) compared to taking



action. The total of this figure for the next ten years comes to £76,193,900 million. This is the financial cost to Central Bedfordshire Council of doing nothing.

**Figure 5: Projected costs and savings from the business as usual (BAU) and CO<sub>2</sub> reduction scenarios factoring in the estimated increase to fuel and energy costs over the next ten years.**





## Carbon Management Projects

A range of projects will be implemented over the next ten years to allow the Council to cut its carbon footprint by 35% by 2015 and 60% by 2020. These include both 'hard' and 'soft' measures and will be delivered across all areas of the Council.

The following sections gives an overview of these projects – with a clear separation of existing projects, planned or funded projects, near-term projects and medium to long-term projects. Full details on these projects are maintained via the Carbon Management Plan Register (CMPR). This will also be used to manage the implementation of these projects and report back to the Climate Change Management Board on progress against the plan.

Where possible exact costs have been given, however in many cases the feasibility is yet to be done. For these projects an estimated capital cost based on the following principles have been applied:

1. The previous cost of carrying out similar projects on the Council estate by the legacy councils.
2. The predicted energy savings multiplied by the average payback for that type of project.

As the implementation of the CMP progresses these figures will be revised and updated based on the actual cost of the project.



### Existing projects

The following table details those measures that are already happening, are planned or represent good opportunities to be explored further.

CMPR Ref	Project details	Lead area	Estimated Annual saving		% of		Payback – years	Additional information
			£	CO <sub>2</sub> (t)	35% target	foot print		
63 64 65 66 67	Street lighting Strategy	SC	198,600	1525	12.9	4.5	-	In progress. Saving relates to when fully implemented
39	Medium term accommodation strategy - move to Technology house	C&SS	122,350	882	7.5	2.6	-	In progress
9	Multi Functional Printing Devices at Technology House	C&SS	12,875	99	0.8	0.3	-	In progress
19	Reduced business mileage from site rationalisation	C&SS	To be calculated	143	1.2	0.4	-	In progress - financial saving from reduced business mileage payments.
23	CHP at Saxon Leisure Centre	SC	12,000	163	1.4	0.5	-	In operation - procured by contractor under an Energy Performance Contract Arrangement is this there is no capital cost to CBC with agreement that electricity generated will be purchased by the Centre at 4p kWh (current average price is 7p kWh).



CMPR Ref	Project details	Lead area	Estimated Annual saving		% of		Payback – years	Additional information
			£	CO <sub>2</sub> (t)	35% target	foot print		
7 11 12	Property improvements as part of maintenance and capital works	C&SS	1,810	17	0.1	0.1	-	In progress – A range of measures such as boiler replacements, double glazing and reroofing.
8 14 10 74	ICT measures	C&SS	42,000	322	2.7	0.1	-	In progress - includes server virtualisation, LCD monitors, move to thin clients and enabling the <i>Energywise</i> setting on Cisco phones.
3 4	Awareness raising – Staff Green Champions Club	OCE	35,419	282	2.4	0.84	0.08	To be launched summer 2010
6 13	Improvements to Technology House by the landlord	C&SS	1,050	10	0.1	0.03	-	In progress - includes new boiler and reroofing.
68 69 70 71	Carbon Reduction measures being taken by Amey	Amey	3,140	13	0.1	0.04	-	In progress - includes awareness campaign, driver training and fuel management system.
<b>Sub Total:</b>			<b>429,244</b>	<b>3,456</b>	<b>29.3</b>	<b>10.3</b>		

## Potential future projects and opportunities

CMPR Ref	Project details	Lead area	Estimated Annual saving		% of		Payback - years	Additional information
			£	CO <sub>2</sub> (t)	35% target	foot print		
128	Automatic Meter Reading equipment (AMRs) at Corporate buildings, libraries and others	C&SS	30,380	242	2.1	0.7	0.50	<i>Estimated cost to install is £21k</i> (£315 per site) with an annual fee of up to £115 per site. Considered an 'early action' measure under CRC
44	AMRs for Schools	CS	104,510	876	7.4	2.6	0.50	Assumes all schools take this up. <i>Estimated cost to install is £47k</i> (£315 per site) with an annual fee of up to £115 per site. Considered an 'early action measure under CRC.
202473	Additional CHP installations at 3 other Leisure Centres	SC	61,404	430	3.6	1.3	-	Will look to replicate model used for CHP installation at Saxon Leisure Centre.
5	Building Management System (BMS) fine tuning at Priory House and Dunstable	C&SS	9,000	72	0.6	0.2	2.25	Estimated cost is £20k.
17	Driver training of CBC fleet	SC	44,970	10	0.1	0.03	9.00	Estimated cost <i>TBC</i>
3246	Schools awareness raising	CS	103,560	867	7.4	2.8		Would need dedicated resource (e.g. EcoSchools Officer) to implement effectively.



CMPR Ref	Project details	Lead area	Estimated Annual saving		% of		Payback - years	Additional information
			£	CO <sub>2</sub> (t)	35% target	foot print		
33 38 40 55 56	Improved insulation & draft proofing in schools	CS	32,430	348	3.0	1.1	0.40	Payback is based on an estimated capital cost of £80k to implement.
21 22 72	Range of measures at Leisure Centres	SC	73,650	615	5.2	1.8	-	Includes AMRs, BMS fine tuning and awareness raising. Would also have a positive impact on raising awareness with centre users.
15	Voltage optimisation at Dunstable	C&SS	7,782	60	0.5	0.2	4.98	Deals with the discrepancy between the actual supply voltage received by a site (207V - 253V) and the optimum voltage the sites electrical equipment needs (220V) resulting in lower energy use.  <i>The estimated cost of a suitable size 'Powerperfector' unit is £38k.</i>
25 26	Measures at Saxon Leisure Centre	SC	35,500	288	2.4	0.9	-	Includes voltage optimisation and LED lighting.
36 43 62	Improved Heating Control systems for schools	CS	13,755	128	1.1	0.4	7.20	Includes measures such as zoning and improved heating controls. <i>Estimated cost is £100k.</i>



CMPR Ref	Project details	Lead area	Estimated Annual saving		% of		Payback - years	Additional information
			£	CO <sub>2</sub> (t)	35% target	foot print		
31 37 41 45 54 57	Improved lighting schemes for schools	CS	121,180	652	5.5	1.9	2.00	Includes measures such as automatic lighting controls, T5 lighting, zoned lighting controls.  <i>Estimated costs - £250k</i>
48 49	New BMS installation in schools and fine tuning of existing BMS systems	CS	28,200	236	2.0	0.7	4.80	Covers installation of new BMS systems and fine tuning of existing systems.  <i>Estimated costs - £138k.</i>
42 60	Upgrade to condensing boilers in schools	CS	34,400	318	2.7	0.9	2.00	<i>Estimated costs - £80k.</i>
2	Lighting improvements at Dunstable such as automatic controls	C&SS	7,782	60	0.5	0.2	4.50	<i>Estimated costs - £35k.</i>
18	Fuel management system	SC	83,940	192	1.6	0.6	-	Estimated cost <i>TBC</i>
29 30	Improved lighting schemes for libraries and other buildings	SC	17,690	136	1.2	0.4	2.80	<i>Estimated costs - £50k.</i>





CMPR Ref	Project details	Lead area	Estimated Annual saving		% of		Payback - years	Additional information
			£	CO <sub>2</sub> (t)	35% target	foot print		
61	Voltage optimisation extend to two further schools	CS	9,100	70	0.5	0.2	0.5	Deals with the discrepancy between the actual supply voltage received by a site (207V - 253V) and the optimum voltage the sites electrical equipment needs (220V) resulting in lower energy use. <i>Estimated cost £50k</i>
16 27 34 35 47 50 51 52 53 58 59	Miscellaneous projects	All	31,268	240	2.1	0.7	-	Includes a range of measures across the Council's estate and schools, including measures such as time controls on electronic equipment, draft proofing and pipe and valve insulation in boiler rooms.
<b>Sub Total</b>			<b>850,501</b>	<b>5,840</b>	<b>49.5</b>	<b>17.3</b>		



### Projected achievement towards target

The CMPR identifies projects that account for 79% of the Council’s 35% CO<sub>2</sub> reduction reductions target

	Total saving		% of	
	£	CO <sub>2</sub> (t)	35% target	CO <sub>2</sub> footprint
<b>Total for all projects (both existing and future projects)</b>	<b>£1,279,745</b>	<b>9,296</b>	<b>79%</b>	<b>28%</b>

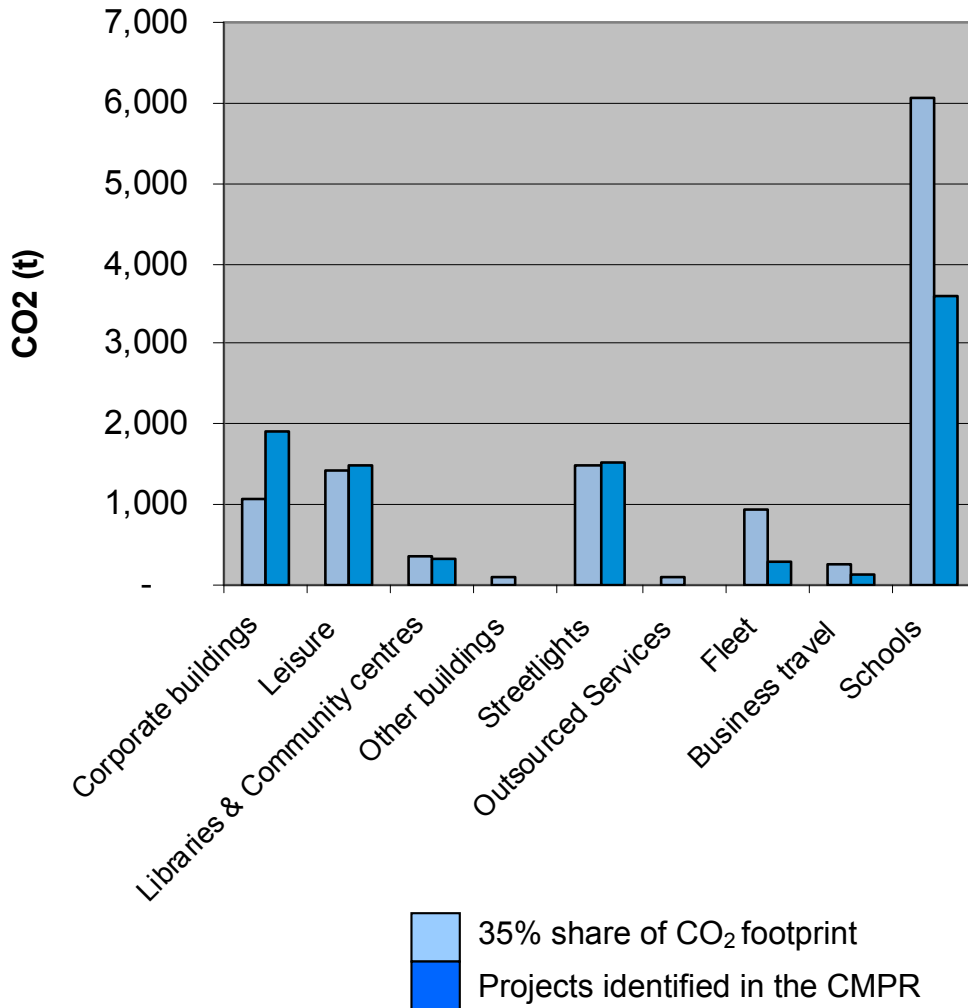
This is an ongoing process. Further carbon reduction opportunities will be identified, assessed, quantified and then acted upon in order to achieve the target that has been set.

Even if all projects currently detailed in the CMPR are acted upon and the quantification of savings has been robust then the Council will still need to identify and implement carbon reduction projects that will reduce emissions by an additional 21%.

There are still many opportunities to deliver the remaining CO<sub>2</sub>. The graph overleaf shows the projects that have been identified against the different areas of the Council’s carbon footprint and that consequently the potential still to be explored further.



**Figure 6: Percentage of projects identified against the different areas of the Council's carbon footprint**





## Carbon Management Plan Financing

Like all other local authorities in the UK, the current economic climate presents the Council with an additional challenge when it comes to fulfilling our potential to successfully address climate change, reduce carbon emissions and be more energy efficient. Where in the past there may have been capital funding available to implement these projects, the Council will now also have to explore other avenues for funding some of the opportunities identified, in order to ensure that in the short term carbon reduction opportunities and the associated efficiency savings are maximised as cost effectively as possible.

### Assumptions

The key assumptions made in calculating the benefits, costs and savings of implementing this Carbon Management Plan are:

- The cost of electricity is currently 7p/kwh.
- The cost of gas is currently 4p/unit.
- The value at stake graph makes the assumption that energy cost will increase by 5.3% per year for gas and electricity and the cost of other fuels will increase by 8.3%. It also assumes that usage will increase by 0.7% per year if a business as usual approach is taken.
- All budgets, and therefore the implementation of projects, are subject to the normal risk under the annual allocation of budgets.
- That all sites, including schools will have AMRs installed in 2010/11.
- The funding of future projects in part is based on the assumption that an 'invest to save' fund will be set up. It is likely that this will initially focus on schools and the benefits of making use of the Salix scheme to secure 50% match funding will be explored.
- A range of existing projects are already funded and being implemented.
- Our major service providers will make an investment in reducing the carbon footprint of those operations they manage on our behalf e.g. leisure and highways. This will in part be driven through robust contract management by the Council, but measures such as the CRC will also have a positive impact.
- A level of building rationalisation is considered through the Medium Term Accommodation Strategy. This will also generate savings that are difficult to quantify at this time, such as reduced staff mileage through better co-location of staff. It is also assumed that the Long Term Accommodation Strategy will locate staff in buildings that are more energy efficient than those being used in the medium term.



## **Benefits / savings – quantified and un-quantified**

### **Quantified benefits**

The CMP has identified opportunities that will help the Council to make good progress towards reducing the Council's carbon footprint by 35%. Our current best estimates anticipate that the total additional cost to implement these measures would be in the region of £1.1 million. The Council has already committed funding to the implementation of the measures detailed in the Council's Streetlighting Strategy and Medium Term Accommodation Strategy. Estimated savings from these two projects when fully implemented come to £320k and 2,410 tonnes of CO<sub>2</sub>. This results in a 7.1% reduction in the Council's carbon footprint and 20.4% of the 35% reduction target.

Given the current financial crisis, in the short term the financing of these measures may be at threat. However the long term commitment to implement these measures remains and it is likely that they will be delivered over a longer period of time to spread costs.

The CMP, if fully implemented (and assuming all measures paid back at an equal rate), would give a return on the investment made in just over 2.5 years. This return on investment does not factor in the avoidance of additional cost resulting from the increases to the cost of energy and fuel.

Schools represent a significant challenge, however the opportunities in schools, if acted upon, would reduce emissions by 18% (6,063 tonnes of CO<sub>2</sub>) and have the scope to reduce the total energy spend in schools by £1.05 million. It is estimated that these measures would cost £893 thousand to implement, giving a total return on investment of less than a year.

### **Unquantified benefits:**

As well as the financial benefits of using less energy and fuel there are also a range of other benefits from implementing the CMP that are difficult to put quantify. These include:

- The positive impact that taking carbon reduction measures will have on behaviour and staff awareness, e.g. staff becoming more 'greener' inspired by the Council taking action to cut its carbon footprint.
- More efficient use of staff time – better co-location of teams will reduce time spent travelling from site to site.
- More comfortable buildings for staff, which in turn make them more productive.
- Good performance in the CRC acting as a motivating factor for greater investment in carbon reduction measures. There is also the potential positive impact of an investment in any reward payments in further carbon reduction measures.
- The impact of schools taking action to reduce their energy use unprompted by the Council. Schools are responsible for the budget that covers a large proportion of



the capital works on their buildings and the Council has little scope, other than to influence schools, on how this is spent.

- Good performance will enhance the Council's reputation as being efficient and serious about climate change.



### **Additional resources**

The Council recognises that the CMP can easily fail or deliver far less than is planned if there are insufficient resources to deliver the projects and opportunities identified. Whilst there is considerable expertise in house the following measures will need to be explored in the future.

- Dedicated Energy Manager or specialist post in the Property team to oversee and build on the implementation of the CMP and to also manage the Council's performance in relation to the CRC.
- To ensure that robust energy management is a core area of delivery in the new Property Management contract when this is tendered and let.
- Build on the good progress made in the Schools Carbon Reduction workshop to secure better links and leadership from the Schools Forum, including the formation of a dedicated subgroup.
- Provision of a dedicated 'invest to save fund' for schools (possibly to be match funded by Salix).

These measures will form part of the action plan and be overseen by CCMB.



## Financial costs and sources of funding

The following table sets out the capital and revenue costs, and potential savings for projects and opportunities with unallocated funding detailed in this CMP. It is based around the following assumptions:

- This does not take in to account the allocated funding for projects detailed in this CMP (pages 19 to 27) taken as part of the Medium-Term Accommodation Strategy, Streetlighting Strategy or where the capital cost will be met by a third party (e.g. an outsourced service provider).
- Where groups of measures have been identified as opportunities it is assumed that the costs would be split equally over a 3 year programme.

The financial pressures that the Council faces are recognised. However, it is also recognised that there are opportunities to be explored that could implement many of the potential projects identified for little or no additional up front financial burden on the Council.

The financing of the opportunities identified in the CMP will be based on the following key principles:

- Ensure that the link between measures taken to operate more efficiently and make savings is made to carbon reduction and energy efficiency, making sure that value of work in this area (both financial and carbon) is assessed and captured.
- Ensure that whole life costs and energy efficiency measures are key considerations as part of the way the Council commissions work on our property, schools, and part of capital projects.
- Focus on the measures that have a good return for the level of expenditure, such as awareness raising and AMR's. This will follow the principles of invest to save, and we will also need to consider some measures based upon an 'invest to avoid future cost increases' mechanism.
- Ensure that the Council makes best use of external funding streams, including Salix, The Low Carbon Buildings Programme and other similar funds.

Future considerations for financing the implementation of the CMP being explored include:

- Incorporating carbon reduction as a key aspect in the criteria by which capital projects are assessed.
- Explore opportunities to reduce the burden on capital budgets through profit share and energy performance contracting agreements – paying for the costs of works through the future energy savings made.
- Maximising the opportunity of additional funding from business through carbon compensation schemes currently being developed by organisations such as the Pure Trust (<http://www.puretrust.org.uk/>)





- Make use of the 50% Salix funding to set up a ring fenced 'invest to save' fund under the Local Authority Energy Fund (LAEF) – this would require the Council to provide 50% match funding.
- If successful in the CRC Energy Efficiency Scheme, use any additional income gained through the reward element of the recycling payment for carbon reduction projects.
- Seek to get better economies of scale through joint procurement of energy efficient technologies with partner organisations and profit share arrangements to reduce the capital outlay on low carbon technologies (e.g. as taken with the CHP at Saxon Leisure Centre).



**Table 1: Annual capital and revenue costs, and potential savings for projects and opportunities with unallocated funding**

	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	Total 5yrs
<b>Energy costs</b>							
Total BAU est.	-£ 3,580,200.00	-£ 3,769,950.60	-£ 3,969,757.98	-£ 4,180,155.15	-£ 4,401,703.38	-£ 4,634,993.66	-£ 27,936,760.77
Corp sites BAU est.	-£ 1,366,746.62	-£ 1,439,184.19	-£ 1,515,460.95	-£ 1,595,780.38	-£ 1,680,356.74	-£ 1,769,415.64	-£ 10,664,899.51
Schools Energy est.	-£ 2,213,453.39	-£ 2,330,766.41	-£ 2,454,297.03	-£ 2,584,374.78	-£ 2,721,346.64	-£ 2,865,578.01	-£ 17,271,861.26

<b>Corporate sites etc</b>	<b>Cost of implementing measures detailed in the CMP</b>							
	Estimated annual capital cost	£ -	-£ 26,000.00	-£ 61,000.00	-£ 88,000.00	-£ 3,000.00	-£ 3,000.00	-£ 181,000.00
	Estimated annual revenue cost	£ -	£ -	-£ 7,700.00	-£ 7,700.00	-£ 7,700.00	-£ 7,700.00	-£ 30,800.00
	Total Estimated costs	£ -	-£ 26,000.00	-£ 68,700.00	-£ 95,700.00	-£ 10,700.00	-£ 10,700.00	-£ 211,800.00
	<b>Estimated savings from measures</b>							
	Estimated savings (amended to reflect energy cost increases)	£ -	£ 91,910.97	£ 142,573.87	£ 142,607.96	£ 184,363.42	£ 190,190.48	£ 751,646.71
	Amended energy spend (incl. project implementation costs & savings for corp. measures)	-£ 1,366,746.62	-£ 1,373,273.22	-£ 1,441,587.08	-£ 1,548,872.42	-£ 1,506,693.31	-£ 1,589,925.16	-£ 8,827,097.80
Estimated efficiency saving (factoring in cost to implement)	£ -	£ 65,910.97	£ 73,873.87	£ 46,907.96	£ 173,663.42	£ 179,490.48	£ 539,846.71	

Continued on the following page



Schools								
Cost of implementing measures in the CMP								
Estimated annual capital cost	£	-	-£ 47,000.00	-£ 270,000.00	-£ 322,400.00	-£ 318,400.00	£ 126,700.00	-£ 831,100.00
Estimated annual revenue cost	£	-	£ -	-£ 15,500.00	-£ 15,500.00	-£ 15,500.00	-£ 15,500.00	-£ 62,000.00
Total Estimated costs	£	-	-£ 47,000.00	-£ 285,500.00	-£ 337,900.00	-£ 333,900.00	£ 111,200.00	-£ 893,100.00
Estimated savings from measures								
Estimated savings (amended to reflect energy cost increases)	£	-	£ 57,430.63	£ 331,426.32	£ 440,347.26	£ 549,633.35	£ 566,891.30	£ 1,945,728.86
Amended energy spend (incl. project implementation costs & savings for Schools measures)	-£	2,213,453.39	-£ 2,320,335.78	-£ 2,408,370.71	-£ 2,481,927.52	-£ 2,505,613.29	-£ 2,187,486.72	-£ 14,117,187.41
Estimated efficiency saving (factoring in cost to implement)	£	-	£ 10,430.63	£ 45,926.32	£ 102,447.26	£ 215,733.35	£ 678,091.30	£ 1,052,628.86

TOTALS								
Totals								
Amended energy spend (incl. project implementation costs & savings for all measures)	-£	3,580,200.00	-£ 3,693,609.00	-£ 3,849,957.79	-£ 4,030,799.93	-£ 4,012,306.61	-£ 3,777,411.88	-£ 22,944,285.21
Total Savings (amended to reflect energy cost increases)	£	-	£ 149,341.60	£ 474,000.19	£ 582,955.22	£ 733,996.77	£ 757,081.78	£ 2,697,375.56
Total Estimated Cost of implementing all measures	£	-	-£ 73,000.00	-£ 354,200.00	-£ 433,600.00	-£ 344,600.00	£ 100,500.00	-£ 1,104,900.00
Total Estimated efficiency saving (factoring in cost to implement)	£	-	£ 76,341.60	£ 119,800.19	£ 149,355.22	£ 389,396.77	£ 857,581.78	£ 1,592,475.56



## Actions to Embed Carbon Management in the Council

At the start of the process of putting together this CMP we assessed the Council’s performance at that time (May 2009) on the Carbon Management Embedding Matrix (see appendix A). As a new Council we assessed the starting level of carbon management and our level of ambition in the following areas to be:

Area	Our starting point	Where we want to be
<b>Corporate Strategy</b>	<ul style="list-style-type: none"> <li>• Draft Climate Change Policy</li> <li>• Climate change references in other strategies</li> </ul>	<ul style="list-style-type: none"> <li>• Top level target allocated across organisation</li> <li>• CO<sub>2</sub> reduction targets in Directorate Business Plans</li> <li>• Action plans in place to embed strategy. Progress routinely reviewed</li> </ul>
<b>Programme Management</b>	<ul style="list-style-type: none"> <li>• Ad hoc reviews of CM actions progress</li> </ul>	<ul style="list-style-type: none"> <li>• Cabinet / SMT review progress against targets on quarterly basis</li> <li>• Regular diagnostic reports provided to Directorates</li> <li>• Progress against target published externally</li> </ul>
<b>Responsibility</b>	<ul style="list-style-type: none"> <li>• An individual provides full time focus for CO<sub>2</sub> reduction</li> <li>• Key individuals have accountability for carbon reduction</li> <li>• Senior Sponsor actively engaged</li> </ul>	<ul style="list-style-type: none"> <li>• CM integrated in responsibilities of senior managers</li> <li>• CM part of all contracts / terms &amp; conditions</li> <li>• Central CO<sub>2</sub> reduction advice available</li> <li>• Green Champions leading local action groups</li> </ul>
<b>Data Management</b>	<ul style="list-style-type: none"> <li>• Annual collation of CO<sub>2</sub> emissions for:                             <ul style="list-style-type: none"> <li>○ buildings</li> <li>○ street lighting</li> <li>○ transport/travel</li> </ul> </li> <li>• Data internally reviewed</li> </ul>	<ul style="list-style-type: none"> <li>• Regular collation of CO<sub>2</sub> emissions for all sources</li> <li>• Data externally verified</li> <li>• Monitoring &amp; targeting in place for:                             <ul style="list-style-type: none"> <li>○ buildings</li> <li>○ street lighting</li> <li>○ transport/travel</li> </ul> </li> </ul>
<b>Communication &amp; Training</b>	<ul style="list-style-type: none"> <li>• Regular awareness campaigns</li> <li>• Staff given CM information on ad hoc basis</li> </ul>	<ul style="list-style-type: none"> <li>• All staff given formalised CO<sub>2</sub>:                             <ul style="list-style-type: none"> <li>○ induction and training</li> <li>○ communications</li> </ul> </li> <li>• Joint CM communications with key partners</li> <li>• Staff awareness tested through surveys</li> </ul>



Area	Our starting point	Where we want to be
<b>Finance &amp; Investment</b>	<ul style="list-style-type: none"> <li>Ad hoc financing for CO<sub>2</sub> reduction projects</li> </ul>	<ul style="list-style-type: none"> <li>Finance committed for 2+yrs of the programme</li> <li>External funding being routinely obtained</li> <li>Ring-fenced fund for carbon reduction initiatives</li> </ul>
<b>Policy Alignment</b>	<ul style="list-style-type: none"> <li>Partial review of key, high level policies</li> <li>Some financial quick wins made</li> </ul>	<ul style="list-style-type: none"> <li>CO<sub>2</sub> friendly operating procedure in place</li> <li>Central team provide advice and review, when requested</li> <li>Barriers to CO<sub>2</sub> reduction routinely considered and removed</li> </ul>
<b>Engagement with Schools</b>	<ul style="list-style-type: none"> <li>No CO<sub>2</sub> / energy reduction policy for schools</li> </ul>	<ul style="list-style-type: none"> <li>A 'whole school approach' including curriculum</li> <li>Mature programme of engagement in place</li> <li>CO<sub>2</sub> saving in schools having a wider community impact</li> </ul>

The areas relating to finance & investment and engagement with schools were noted as the two areas where we would face the biggest challenges.

In order to achieve the Council’s vision with regard to carbon reduction we will ensure that responsibility and ownership is embedded across all areas of the Council’s operations. From April 2010 work will begin with each service area to put together an action plan to clarify what their area is required to deliver, when and by whom. This will be overseen by CCMB and led in each service area by the relevant officer members of the Climate Change action teams. These action plans will be included in future refreshes of the CMP.

The action plans will reflect key elements of the carbon management matrix as well as those actual projects that will deliver CO<sub>2</sub> savings.

Area	How this is being addressed	Current progress and key dates
<b>Corporate Strategy</b> - embedding CO <sub>2</sub> saving across the organisation	<p>To further embed carbon reduction across the Council CCMB will oversee work in the coming year that will explore:</p> <ul style="list-style-type: none"> <li>Disaggregation of targets out to service areas as an effective way of building ownership across the organisation – this would be based on the Council’s carbon footprint,</li> <li>Individual carbon footprint reports for schools, tracking level of emissions and source against area and national benchmarks.</li> </ul>	<p>The Council’s corporate plans now have to identify future actions that have implications for to sustainability. This will ensure that the Council’s targets for climate change are embedded into the Council’s corporate plans and ensure that they endure and are measured.</p>



Area	How this is being addressed	Current progress and key dates
	<ul style="list-style-type: none"> <li>Ensure that climate change implications are considered fully and highlighted in all committee reports (including those for Executive and Overview &amp; Scrutiny).</li> </ul>	
<p><b>Programme Management</b> – bringing it all together effectively</p>	<p>The formulation of the CMP has been programme managed by Climate Change Management Board. CCMB is made up of senior managers from those key areas responsible for implementing many of the measures.</p>	<p>Over 2010/11 it will be explored how carbon reduction work can link into other existing management frameworks – such as the Council's Efficiency Implementation Group (EIG), and if possible whether CCMB's role can be replaced by EIG. This will help to embed programme management of the CMP into how the Council functions and will give carbon reduction equal weighting with other efficiency measures rather than it being seen as a niche concern.</p>
<p><b>Responsibility</b> - being clear that saving CO<sub>2</sub> is everyone's job</p>	<p>Carbon reduction is truly a cross cutting issue that has implications for all areas of the Council. To ensure that the message is clear and that all areas take responsibility for their role in this the following measures will be taken:</p> <ul style="list-style-type: none"> <li>Ensure that representation on CCMB covers all key areas of the Council.</li> <li>Regularly brief Directors and key senior managers about the implementation of the CMP (and wider Climate Change Strategy) to ensure that they remain fully engaged.</li> <li>Launch a Green Champions club for staff to raise awareness and empower staff to take action.</li> <li>As projects progress towards implementation the CMPR and CMP will be updated to give lead officer details.</li> </ul>	<p>Green Champions club scheduled to be launched on or around World Environment Day 2010 (5<sup>th</sup> June). This will be supported by a high profile launch event, a range of communications including blogs on climate change and carbon reduction from the Council's Directors and Chief Executive. These will focus on the message that saving CO<sub>2</sub> is everyone's responsibility.</p> <p>Links will also be made to existing Council campaigns, such as 'every penny counts'.</p>
<p><b>Data Management</b> – measuring the difference and measuring the benefit</p>	<p>Ongoing measurement of the impact of measures taken, as well as to identify further opportunities will be facilitated by the roll out of AMR's across all sites. This will be supported by training for facilities managers and site agents on energy management to ensure that these are used properly.</p> <p>The Council will report on its carbon footprint annually and as part of this</p>	<p>Data collection is primarily based on the Council's requirement to report annually to DECC on NI 185:CO<sub>2</sub> reduction from LA operations. This covers all of the data that is included within the scope for the Council's carbon footprint. The majority of this is energy use data from our buildings and schools and we already have existing arrangements in place with our property contractor, Mouchel, who</p>



Area	How this is being addressed	Current progress and key dates
	<p>include:</p> <ul style="list-style-type: none"> <li>• a progress report against the 2008/09 baseline;</li> <li>• Details of the key projects that have been implemented;</li> <li>• Details of the estimated financial saving made;</li> <li>• An overview of the action planned for the forthcoming year.</li> </ul> <p>As data management mechanisms improve (through AMR's) the Council will explore producing a quarterly report on actual progress from metering etc.</p>	<p>collect energy use data from utility bills on the Council's behalf.</p> <p>This requirement along with the data accuracy aspects of CRC will be used as drivers to ensure that all relevant data is effectively maintained and managed</p>
<p><b>Communication &amp; Training</b> – ensuring everyone is aware</p>	<p><b>Green Champions Club:</b> The Green Champions Club will encourage employees to sign up to be champions to help save energy and make Central Bedfordshire Council a more environmentally friendly place to work. Each green champion will be given a support pack that includes:</p> <ul style="list-style-type: none"> <li>• A booklet of background information and includes tips for work and home, energy saved for certain actions and what this equals in terms of financial savings.</li> <li>• Posters to put up in their office highlighting the benefits of saving energy etc.</li> <li>• Stickers to go by light switches, on PCs etc reminding the users not to leave on stand-by, turn off when they leave the rooms etc.</li> <li>• A regular newsletter detailing to members what the Council is doing to become greener and reduce its carbon footprint and highlight environmentally themed projects happening in the Central Bedfordshire area.</li> <li>• Dedicated intranet pages with the latest information and advice, copies of newsletters, posters etc.</li> <li>• Occasional briefing sessions and possibly an annual conference/meeting with awards for the greenest champions of the year.</li> <li>• Champions to get involved with</li> </ul>	<p>Green Champions club scheduled to be launched on or around World Environment Day 2010 (5<sup>th</sup> June).</p> <p>Materials are already provided for staff induction workshops, these will be reviewed and enhanced – linking into the Green Champions' initiative.</p> <p>A series of training events have already been carried out for planners and building control officers on the Code for Sustainable Homes and renewable technologies.</p> <p>WebPages on climate change and carbon reduction are published. These contain basic content and will be updated over the coming year.</p>



Area	How this is being addressed	Current progress and key dates
	<p>volunteering e.g. tree planting at the weekend.</p> <p>The scheme will be strongly branded with the CBC logo with additional text 'Be greener'. This will feature on all literature, poster, intranet pages etc.</p> <p><b>Induction Programme:</b> Materials are already provided for staff induction workshops to raise awareness of the Council's carbon footprint and role of staff in carbon reduction.</p> <p><b>Bespoke Training:</b> Where appropriate bespoke training will be arranged. This will be based around specific themes or developments</p> <p><b>Web Pages:</b> The Council's internal and external WebPages will be developed over the coming year to provide a valuable resource to staff on carbon reduction and climate change. They will also be used to communicate the CMP and Climate Change Strategy and report on performance in this area.</p>	
<p><b>Finance &amp; Investment</b> – the money to match the commitment</p>	<p>Finance and investment are explored in pages 28 to 34 of this Plan.</p>	<p>Whilst the proposed measures for the first two years of the scheme are not currently fully funded it should be noted projects that will deliver substantial carbon reduction are - these being the Council's Streetlighting Strategy and Medium Term Accommodation project. These two projects alone are estimated to deliver a reduction in the Council's carbon footprint of 7.5% and deliver financial savings in the region of £335,000.</p>
<p><b>Policy Alignment</b> – saving CO<sub>2</sub> across your operations</p>	<p>All new Council policies will include an assessment of the sustainability implications of the policy – as part of the committee approval process. This will include identifying and incorporating carbon reduction elements as appropriate.</p>	<p>The Council's Climate Change Strategy links the key aspects of the Council's main strategies and policies that will contribute to the delivery of the Council's vision and goals in relation to climate change (and carbon reduction).</p>
<p><b>Engagement with Schools</b> – influencing Schools to reduce their CO<sub>2</sub> footprint</p>	<p>Schools represent a significant challenge as we develop and implement a carbon reduction and climate change strategy. Currently emissions from schools make up 52% of our carbon footprint and just over 1% of the area's carbon footprint. The Council's Educational vision – '<i>Transforming learning</i>' makes the</p>	<p>Schools carbon reduction workshop held in February 2010. Outputs from this are forming the basis of the Council's future approach to better engagement with Schools.</p> <p>Proposal for a sub group of the Schools Forum concerned with schools capital projects and carbon reduction to</p>





Area	How this is being addressed	Current progress and key dates
	<p>following commitments:</p> <ul style="list-style-type: none"> <li>• Each school will be provided with data on its carbon footprint and we will work closely with schools to maximise energy efficiency and the use of renewable technologies alongside other issues such as waste minimisation and recycling, water conservation and biodiversity.</li> <li>• Any new schools and major refurbishments will be designed to ensure they meet high standards to minimise environmental impact.</li> <li>• We are also developing a strategy on sustainable modes of travel for educational establishments to promote walking, cycling and the use of sustainable transport to school.</li> <li>• We will encourage schools to showcase good sustainability practices in energy, water, waste, travel, food and procurement in buildings and grounds to their pupils, staff and communities. This will place schools at the centre of community action on climate change and promote learning about the environmental features of buildings and also about wider sustainability and environmental issues.</li> </ul>	<p>be proposed at the next meeting of the Schools Forum.</p> <p>Potential invest to save pot identified for schools – proposal will be made to Schools Forum to use this to secure match funding from Salix to give a larger pot fund for schools’ carbon reduction work.</p> <p>The Central Bedfordshire educational vision ‘<i>Transforming learning</i>’ commits to supporting schools to be more sustainable and tackle climate change (through measures detailed in the ‘How is this being addressed column’).</p> <p>Increasing the number of EcoSchools in Central Bedfordshire is a key milestone as part of the LAA NI 186 delivery plan – work to promote this along with other measures (free Energy Saving Meters for CFL and AMR’s) to be progressed over 2010/11.</p>
<p><b>Engagement of your Suppliers –</b> working with suppliers to reduce your carbon footprint</p>	<p>The Council spends £165 million on external goods and services annually. As shown in the Council’s carbon footprint, many of these procurement decisions have the potential to reduce CO<sub>2</sub> emissions and ultimately the Council’s carbon footprint.</p> <p>Procurement processes are being put in place by the Council that will allow us to drive forward environmental improvements and use our buy power to help shape the market.</p> <p>The Council’s Corporate Commissioning &amp; Procurement Strategy is committed to sustainable</p>	<p>The highways contract provider, Amey, already has carbon reduction as one of its key performance indicators.</p> <p>Good engagement with the leisure service providers, especially Stevenage Leisure, who are proactively taking carbon reduction measures at the leisure centres they run on the Council’s behalf. These are captured in the projects and future opportunities section of the plan.</p> <p>Consideration of the environment is now a mandatory for all quotations and tenders irrespective of value.</p>

<sup>1</sup> More details at: <http://www.defra.gov.uk/sustainable/government/publications/procurement-action-plan/index.htm>



Area	How this is being addressed	Current progress and key dates
	procurement and will adopt the flexible framework as recommended in <i>Procuring the Future, Sustainable Procurement National Action Plan</i> produced by the government's Sustainable Procurement Taskforce <sup>1</sup> .	



## **Programme Management of the Carbon Management Plan**

### **The Programme Board – strategic ownership and oversight**

The programme management of the CMP is being overseen by the Council's Climate Change Management Board (CCMB). This group is made up of key managers with specific expertise related to this agenda and/or responsibility for those core areas that will deliver this Strategy.

During early 2010/11 a decision will be made whether the corporate CCMB will continue to lead on and oversee the implementation of the Climate Change Strategy and champion the necessary actions to embed climate change and good carbon management across how the Council operates. Whichever board ends up programme managing the implementation of the CMP, their role will be to:

- Programme manage the implementation of the CMP.
- Champion and provide leadership on carbon reduction.
- Review the strategic direction and targets.
- Monitor progress towards objectives and targets.
- Remove obstacles to the successful completion of climate change projects.
- Review and champion plans for financial provision.
- Ensure that there is a framework to co-ordinate projects that deliver the objectives of the Climate Change Strategy.

The relevant portfolio holder will be the member champion for climate change and will provide the focal point for member involvement in carbon reduction.

The projects in the CMP will be reviewed as a standing item on each programme board meeting, and the CMP will be refreshed annually.

### **The Climate Change Action Teams – delivering the projects**

Recognising the burden of staff time of group meeting the Council has opted for a flexible approach to progressing climate change projects and as a result does not hold regular formal Carbon Management Team meetings. The only exception to this is an annual opportunities and update session.

Regular meetings are held with key staff relating to the delivery of specific carbon reduction projects or elements of the CMP. These are focused around the project being delivered or service area responsible.

### **Succession planning for key roles**

Currently the programme board has a named chair and vice chair, the latter of which will step in and take the chair's responsibilities in their absence.

The Director of Sustainable Communities is also the named Director lead for Climate Change. The Climate Change Strategy and CMP will be agreed via CMT and Executive who will ensure that adequate resource is in place.



The Council's carbon reduction target will also be managed through the Council's performance management framework – this will ensure that there is adequate resource to deliver the targets.

Climate Change is a named responsibility for a Portfolio Holder who will provide the political lead and ensure that this issue remains on the Council's agenda.

In the event of lead Officers leaving the Council, handover arrangements will be put in place along with replacement with suitably qualified individuals. Where there is a gap an interim lead will be put in place in order to ensure that the programme's delivery does not stall.



## Ongoing stakeholder management

Individual or Group	Their interest or issues	Means of Communication
<b>Portfolio Holder</b>	<ul style="list-style-type: none"> <li>• That the Council is effectively addressing this issue.</li> <li>• Operating at a level equal to current best practice.</li> <li>• Concerns of the constituency</li> </ul>	<ul style="list-style-type: none"> <li>• Regular Briefings with Director/lead officers.</li> </ul>
<b>Executive</b>	<ul style="list-style-type: none"> <li>• That the Council is effectively addressing this issue.</li> <li>• Political agenda</li> <li>• Budget allocation</li> <li>• Concerns of the constituency</li> </ul>	<ul style="list-style-type: none"> <li>• Input from the Portfolio Holder.</li> <li>• Executive committee papers.</li> <li>• Annual updates.</li> <li>• Feedback for the overview &amp; scrutiny process.</li> </ul>
<b>Corporate Management Team</b>	<ul style="list-style-type: none"> <li>• That the Council is effectively addressing this issue.</li> <li>• Budget allocation.</li> <li>• Directorate specific implications.</li> </ul>	<ul style="list-style-type: none"> <li>• Progress report at CMT meetings.</li> <li>• Agenda, minutes and papers.</li> </ul>
<b>Programme Board</b>	<ul style="list-style-type: none"> <li>• Effective programme management of the CMP.</li> <li>• Performance against targets.</li> <li>• Financial implications.</li> </ul>	<ul style="list-style-type: none"> <li>• Progress report at board meetings.</li> <li>• Agenda, minutes and papers.</li> </ul>
<b>Finance</b>	<ul style="list-style-type: none"> <li>• Carbon Reduction Commitment.</li> <li>• Case for Action – costs will continue to rise if we don't take action.</li> <li>• Programme will be governed to ensure effective use of scarce resources.</li> <li>• Potential for external funding e.g. Salix.</li> </ul>	<ul style="list-style-type: none"> <li>• Briefings with Director and senior managers.</li> <li>• Participation in the Programme Board.</li> </ul>
<b>Staff</b>	<ul style="list-style-type: none"> <li>• Their own role in reducing CO<sub>2</sub> emissions.</li> <li>• Personal interest – 'It's something we should be doing'.</li> <li>• Working for an organisation that promotes corporate social responsibility (CSR).</li> </ul>	<ul style="list-style-type: none"> <li>• Team Talk briefings.</li> <li>• Staff induction.</li> <li>• Internal poster campaign, intranet &amp; use of e-mail.</li> <li>• Articles in internal staff magazine.</li> <li>• Green Champions.</li> </ul>
<b>LSP</b>	<ul style="list-style-type: none"> <li>• Council demonstrating leadership on this issue.</li> </ul>	<ul style="list-style-type: none"> <li>• The Carbon Reduction Working Group and thematic group.</li> </ul>



Individual or Group	Their interest or issues	Means of Communication
	<ul style="list-style-type: none"> <li>• Opportunities for joint working</li> </ul>	<ul style="list-style-type: none"> <li>• Community focused conference on climate change.</li> <li>• Updates via the NI 186 delivery plans.</li> </ul>
<b>Outsourced service providers</b>	<ul style="list-style-type: none"> <li>• Satisfying the Council's requirements for carbon reduction.</li> <li>• Benefiting from efficiency savings.</li> <li>• CSR</li> <li>• Managing their involvement in CRC</li> </ul>	<ul style="list-style-type: none"> <li>• Via existing contract management arrangements.</li> <li>• Participation in ad-hoc Climate Change Action Team sessions.</li> <li>• Performance reporting.</li> <li>• On site meeting with leads for CO<sub>2</sub> reduction.</li> </ul>
<b>Community</b>	<ul style="list-style-type: none"> <li>• Personal interest – 'It's something we should be doing'.</li> <li>• How Council tax is spent.</li> <li>• Election of members.</li> <li>• FOI and EIR requests.</li> <li>• Enquiries to the Council's customer services team</li> </ul>	<ul style="list-style-type: none"> <li>• Community focused conference on climate change.</li> <li>• Information on internet – including annual progress reports.</li> <li>• Articles in the resident's newsletter and press releases to local papers.</li> </ul>
<b>Media</b>	<ul style="list-style-type: none"> <li>• Reporting news and information to the local community.</li> <li>• Inviting comment and discussion.</li> </ul>	<ul style="list-style-type: none"> <li>• Via Communications Team.</li> <li>• Press releases from the Council.</li> <li>• Response to their FOI/EIR requests.</li> </ul>
<b>Heads of Service</b>	<ul style="list-style-type: none"> <li>• Other priorities to consider.</li> <li>• Resource implications.</li> <li>• Capital investment may be required.</li> <li>• Performance of their area in contributing to targets.</li> </ul>	<ul style="list-style-type: none"> <li>• Lead via the programme board.</li> <li>• One to one briefings and support.</li> <li>• Involvement in programme board and Climate Change Action teams.</li> </ul>

**Annual progress review**

Each year a formal review of progress against the plan and target will be conducted. Progress will also be monitored against the target on a more frequent basis, e.g. quarterly by the Programme Board).

The review will consider:

- The cost and all benefits from the Programme:
  - Financial savings.
  - CO<sub>2</sub> savings against the target.



- Less quantifiable benefits, such as influencing the local community (supporting NI186).
- Progress with NI185 reporting.

This will be reported via the Programme Board to CMT and Executive. The progress report will also be made available to all staff and the public via the Council's internet and intranet sites.



## Appendix A: Carbon Management Matrix - Embedding

	CORPORATE STRATEGY	PROGRAMME MANAGEMENT	RESPONSIBILITY	DATA MANAGEMENT	COMMUNICATION & TRAINING	FINANCE & INVESTMENT	POLICY ALIGNMENT *	ENGAGEMENT OF SCHOOLS
<b>5</b> <b>BEST</b>	<ul style="list-style-type: none"> <li>Top level target allocated across organisation</li> <li>CO<sub>2</sub> reduction targets in Directorate Business Plans</li> <li>Action plans in place to embed strategy. Progress routinely reviewed</li> </ul>	<ul style="list-style-type: none"> <li>Cabinet / SMT review progress against targets on quarterly basis</li> <li>Regular diagnostic reports provided to Directorates</li> <li>Progress against target published externally</li> </ul>	<ul style="list-style-type: none"> <li>CM integrated in responsibilities of senior managers</li> <li>CM part of all contracts / T's&amp;C's</li> <li>Central CO<sub>2</sub> reduction advice available</li> <li>Green Champions leading local action groups</li> </ul>	<ul style="list-style-type: none"> <li>Regular collation of CO<sub>2</sub> emissions for all sources</li> <li>Data externally verified</li> <li>Monitoring &amp; Targeting in place for:                             <ul style="list-style-type: none"> <li>buildings</li> <li>street lighting</li> <li>transport/travel</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>All staff given formalised CO<sub>2</sub>:                             <ul style="list-style-type: none"> <li>induction and training</li> <li>communications</li> </ul> </li> <li>Joint CM communications with key partners</li> <li>Staff awareness tested through surveys</li> </ul>	<ul style="list-style-type: none"> <li>Finance committed for 2+ yrs of Programme</li> <li>External funding being routinely obtained</li> <li>Ring-fenced fund for carbon reduction initiatives</li> </ul>	<ul style="list-style-type: none"> <li>CO<sub>2</sub> friendly operating procedure in place</li> <li>Central team provide advice and review, when requested</li> <li>Barriers to CO<sub>2</sub> reduction routinely considered and removed</li> </ul>	<ul style="list-style-type: none"> <li>A 'whole school approach' including curriculum</li> <li>Mature programme of engagement in place</li> <li>CO<sub>2</sub> saving in schools having a wider community impact</li> </ul>
<b>4</b>	<ul style="list-style-type: none"> <li>CO<sub>2</sub> reduction commitment in Corporate Strategy</li> <li>Top level targets set for CO<sub>2</sub> reduction</li> <li>Climate Change Strategy reviewed annually</li> </ul>	<ul style="list-style-type: none"> <li>Sponsor reviews progress and removes blockages through regular Programme Boards</li> <li>Progress against targets routinely reported to Senior Mgt Team</li> </ul>	<ul style="list-style-type: none"> <li>CM integrated in to responsibilities of department heads</li> <li>Cabinet / SMT regularly updated</li> <li>Staff engaged through Green Champion network</li> </ul>	<ul style="list-style-type: none"> <li>Annual collation of CO<sub>2</sub> emissions for:                             <ul style="list-style-type: none"> <li>buildings</li> <li>street lighting</li> <li>transport/travel</li> </ul> </li> <li>Data internally reviewed</li> </ul>	<ul style="list-style-type: none"> <li>All staff given CO<sub>2</sub> reduction:                             <ul style="list-style-type: none"> <li>induction</li> <li>communications</li> </ul> </li> <li>CM matters communicated to external community</li> </ul>	<ul style="list-style-type: none"> <li>Coordinated financing for CO<sub>2</sub> reduction projects via Programme Board</li> <li>Funding principles and processes agreed</li> <li>Finances committed 1yr ahead</li> <li>Some external financing</li> </ul>	<ul style="list-style-type: none"> <li>Comprehensive review of policies complete</li> <li>Lower level policies reviewed locally</li> <li>Unpopular changes being considered</li> </ul>	<ul style="list-style-type: none"> <li>A clear emphasis on energy / CO<sub>2</sub> reduction in schools</li> <li>Council activities fully coordinated</li> <li>Broad set of education stakeholders engaged</li> <li>Funding in place</li> </ul>
<b>3</b>	<ul style="list-style-type: none"> <li>CO<sub>2</sub> reduction vision clearly stated and published</li> <li>Climate Change Strategy endorsed by Cabinet and publicised with staff</li> </ul>	<ul style="list-style-type: none"> <li>Core team regularly review CM progress:                             <ul style="list-style-type: none"> <li>actions</li> <li>profile &amp; targets</li> <li>new opportunities</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>An individual provides full time focus for CO<sub>2</sub> reduction</li> <li>Key individuals have accountability for carbon reduction</li> <li>Senior Sponsor actively engaged</li> </ul>	<ul style="list-style-type: none"> <li>Collation of CO<sub>2</sub> emissions for limited scope i.e. buildings only</li> </ul>	<ul style="list-style-type: none"> <li>Environmental / energy group(s) given ad hoc:                             <ul style="list-style-type: none"> <li>training</li> <li>communications</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>A view of the cost of CO<sub>2</sub> reduction is developing, but finance remains ad-hoc</li> <li>Some centralised resource allocated</li> <li>Finance representation on CM Team</li> </ul>	<ul style="list-style-type: none"> <li>All high level and some mid level policies reviewed, irregularly</li> <li>Substantial changes made, showing CO<sub>2</sub> savings</li> </ul>	<ul style="list-style-type: none"> <li>A person has responsibility for Schools CO<sub>2</sub> reduction</li> <li>Schools CO<sub>2</sub> reduction projects coordinated</li> <li>Ad-hoc funding</li> </ul>
<b>2</b>	<ul style="list-style-type: none"> <li>Draft Climate Change Policy</li> <li>Climate Change references in other strategies</li> </ul>	<ul style="list-style-type: none"> <li>Ad hoc reviews of CM actions progress</li> </ul>	<ul style="list-style-type: none"> <li>CO<sub>2</sub> reduction a part-time responsibility of a few department champions</li> </ul>	<ul style="list-style-type: none"> <li>No CO<sub>2</sub> emissions data compiled</li> <li>Energy data compiled on a regular basis</li> </ul>	<ul style="list-style-type: none"> <li>Regular awareness campaigns</li> <li>Staff given CM information on ad-hoc basis</li> </ul>	<ul style="list-style-type: none"> <li>Ad hoc financing for CO<sub>2</sub> reduction projects</li> </ul>	<ul style="list-style-type: none"> <li>Partial review of key, high level policies</li> <li>Some financial quick wins made</li> </ul>	<ul style="list-style-type: none"> <li>Ad-hoc schools projects to specifically reduce energy / CO<sub>2</sub></li> </ul>
<b>1</b> <b>Worst</b>	<ul style="list-style-type: none"> <li>No policy</li> <li>No Climate Change reference</li> </ul>	<ul style="list-style-type: none"> <li>No CM monitoring</li> </ul>	<ul style="list-style-type: none"> <li>No recognised CO<sub>2</sub> reduction responsibility</li> </ul>	<ul style="list-style-type: none"> <li>No CO<sub>2</sub> emissions data compiled</li> <li>Estimated billing</li> </ul>	<ul style="list-style-type: none"> <li>No communication or training</li> </ul>	<ul style="list-style-type: none"> <li>No specific funding for CO<sub>2</sub> reduction projects</li> </ul>	<ul style="list-style-type: none"> <li>No alignment of policies for CO<sub>2</sub> reduction</li> </ul>	<ul style="list-style-type: none"> <li>No CO<sub>2</sub> / energy reduction policy for schools</li> </ul>

\* Major operational policies and procedures, e.g. Capital Projects, Through Life Costing, Procurement, HR, Business Travel