



# *Vale of White Horse District Council* Carbon Management Programme

# **Carbon Management Plan (CMP)**



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### Foreword from the Chief Executive and Political Sponsor

Climate Change is one of the most important challenges facing society. Knowing what we do now about our effect on the climate, it is no longer possible to just hope that everything will be all right. The effects of climate change are already being felt, we need to act now to reduce emissions of greenhouse gases.

To this end we are pleased that the Council has produced this Carbon Management Plan. 'Rising to the challenge of climate change' is one of the six strategic objectives of the Council and will demonstrate its commitment by setting ambitious targets for reducing CO2 emissions. This plan signals a significant commitment by this Council to reduce its Carbon emissions in the medium and long term. In securing these targets the Council also hopes to save on its energy costs and invest these efficiency savings into delivering better services.

The Council is grateful for the support provided by the Carbon Trust and our partners South Oxfordshire and Aylesbury Vale District Councils without which this plan would have been considerably more difficult to produce.

Councillor Angela Lawrence Portfolio Holder for Climate Change David Buckle Chief Executive

### 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 inline 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.

The Vale of White Horse District Council was selected in 2008, amidst strong competition, to take part in this ambitious programme. The Vale of White Horse 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 CO2 by 20% by 2012 and underpins potential financial savings to the council of around £1 million.

There are those that can and those that do. Local authorities can contribute significantly to reducing  $CO_2$  emissions. The Carbon Trust is very proud to support The Vale of White Horse District Council in their ongoing implementation of carbon management.



Richard Rugg Head of Public Sector, Carbon Trust





### Management Summary

#### Introduction

Tackling climate change is a one of this Council's 6 corporate priorities. The Council was fortunate to secure a place on phase 6 of the Carbon Trusts Local Authority Carbon Management Programme (LACMP). The LACMP is a government sponsored project that provides professional technical and change management guidance to the Council as it progresses through a structured programme devised and operated by the Carbon Trust. The programme has two key outputs, the generation of an accurate carbon baseline upon which future progress can be measured and the production a Carbon Management Plan (CMP).

#### The 2007 Baseline

The Council has a 2007 emissions baseline is 4251 tonnes of carbon costing £1.2 million in energy costs. Most Council emissions are outside our direct control, therefore any success in reducing emissions will rely on the cooperation of third party contractors. 41% of emissions are from the leisure centres operated by SOLL and CLS (70% of leisure emissions are from the White Horse Tennis and Leisure Centre). 32% of emissions are from waste fleet and grounds maintenance operations (85% of fleet emissions are from the waste contract).

#### Targets

Currently the Council has a long term target to reduce carbon emissions by 60% by 2050 based on a 2007 baseline and a short term LAA2 target of 8% by 2010/11. It is proposed that a medium term target of a 20% reduction by 2012 be adopted as the key target for the Carbon Management Plan. The Carbon Management Plan contains projects selected to ensure the Council achieves it various emissions targets. If the proposed measures are not implemented, the Council and contractors can expect to incur cumulative additional energy costs exceeding  $\pounds$ 1million over 5 years associated with about 1000 tonnes of avoidable emissions. This figure is referred to as the value at stake.

#### The Projects

The Council is already carrying out a range of projects to reduce emissions, these have been identifies as 'existing projects'. Further projects are planned over the period 2009 to 2012 which will deliver a 19.8% emissions reduction. The structure of the Council's emissions mean that the projects which deliver the largest emissions reduction will be delivered through our leisure and waste contractors.

#### Finance

The Council has already proposed  $\pounds150,000$  capital until 2010, however further capital will be required in 2011/12. To fully fund all the projects in the CMP the Council will need to allocate a further  $\pounds130,000$ . Most of this further funding is for replacing the boilers in Abbey House.

#### Implementing the plan and programme management

Critical to the success of the CMP is the ability of the Council to embed carbon management within the Council. Section 6 details how the Council will ensure carbon management is embedded within policy/strategy, communication, employee responsibility, data management and finance. The project programme in the CMP will be delivered via Council Service Plans with guidance from the Climate Change Project Team. Implementation will be monitored by both the Climate Change Project Board and the corporate governance process. Every year the Council will produce an annual carbon plan charting progress towards its 2012 target.



### 1 Introduction

The Carbon Management Plan (CMP) is a plan of key activities to deliver the strategic objectives and targets identified and committed to under the Local Authority Carbon Management Programme (LACMP).

This CMP is a critical part of LACMP and has been developed by the Vale of White Horse District Council under the guidance of the Carbon Trust. The plan sets out the sources of the Council's emissions, establishes targets and defines projects that will be implemented to achieve these targets over 5 years from 2008 to 2012 inclusive. The CMP will provide a basis for all carbon management activity with the Council and will be updated annually. The Council has followed the 5 step process developed by the Carbon Trust. The LACMP is an accomplished programme that has already helped many local authorities to achieve significant carbon emissions reductions.



The LACMP 5 step process

The Council has been pro-active in helping local residents to reduce energy consumption emissions since 1997 when it established the Vale Energy Team – a significant step for a small district council. With the increased concern about climate change the Council felt it had to make tackling this issue a corporate priority.

The large increase in emissions reduction required by all sectors in the community left the authority in no doubt that it had to demonstrate its own commitment to reducing emissions before it could expect similar levels of commitment from others

In May 2007 the Council signed the Nottingham Declaration on Climate Change and began implementing a climate change plan focusing initially at the Council's own operations. Reducing our carbon emissions is core part of the Council's Climate Change Strategy. Fortunately the Council secured a valuable place on phase 6 of the Carbon Trust's LACMP. This has enable us to progress much faster that had been planned and will ensure that the Council can take its experience to the Vale Strategic Partnership in 2009 with the intention of developing a district wide Carbon Management Plan with our strategic partnership.





### 2 Carbon Management Strategy

This section sets out the context and drivers influencing the development of the Carbon Management Programme, and the Council's strategy for delivering the programme.

#### 2.1 Context and drivers for Carbon Management

Climate change is the biggest threat to the long-term viability of the planet to maintain a biosphere capable of supporting life as we currently experience it. There are now a powerful array of international national, regional and local drivers forcing individuals and organisations to reduce emissions and to adapt to climate change.

#### Climate Change is happening and it effects are already being felt.

#### International Drivers

International drivers for carbon management are likely to gain more traction with the recent election of a Democrat President in the United States. Currently international drivers include

- United Nations Framework Convention on Climate Change.
- The Kyoto Protocol and negotiations on its eventual replacement.
- EU Emissions Trading Scheme and the EU Energy Performance of Building Directive.
- Rising energy prices.

#### National Drivers

- UK Climate Change Programme and Carbon reduction targets.
- The Climate Change Act 2008.
- Climate Change and Sustainable Energy Act 2006, Sustainable Communities Act 2007.
- Renewables Obligation.
- New National Framework of Performance indicators for Local Authorities.
- Introduction of Display Energy Certificates.

#### Local Drivers

- Nottingham Declaration Commitments.
- The Council's Climate Change Strategy.
- The Local Area Agreement 2 (contains targets for NI 185 CO2 emissions from local authority operations.
- The Sustainable Community Strategy and Local Development Framework.
- Efficient use of public funds and revenue savings required by the Council.
- Staff perceptions on climate change as evidenced by recent staff surveys.
- Joint Senior Management of the Vale of White Horse and South Oxfordshire District Councils.
- Rising cost of energy to the Council and its contractors.

Vale of White Horse Carbon Management Programme Carbon Management Plan





#### 2.2 Our low carbon vision

The Vale of White District Council wants to show leadership within the district in tackling climate change. The Council will do this by drastically reducing our CO2 emissions and adapting to future climatic variation. An additional benefit of reducing energy consumption will be a reduction in long-term operational costs and our exposure to increasing energy prices.

#### 2.3 Strategic themes

In line with our vision above the Council has structured its approach to carbon management via the following 4 themes.

- 1. To act quickly in the short and medium term to reduce emissions.
- 2. To use the LACM process to build carbon management into our supply chain via our procurement strategy.
- 3. To use the LACM process to position carbon management as a key consideration for all decisions taken by the Council.
- 4. To build on existing partnerships to deliver greater district wide emissions reductions via the Sustainable Communities Strategy.

#### 2.4 Targets and objectives

The Council has a range of short, medium and long term target as set out below

#### Short Term – Oxfordshire LAA2 Target

The Vale of White Horse District will reduce CO2 emissions from Council activities by 8% from a 2008 baseline by the end of 2010

#### Medium Term – The LACM6 Target

The Vale of White Horse District will reduce CO2 emissions from Council activities by 20% from a 2007 baseline by 2012. Annual reviews of the CMP in conjunction with the production of an Annual Carbon Report will enable the Council to review this target over time.

#### Long Term – The Council's Climate Change Strategy Target

The Vale of White Horse District will reduce CO2 emissions from Council activities by 60% from a 2008 baseline by 2050. This target is likely to change to a considerably more ambitious one as more information comes to light which shows that a much greater cut in emissions will be required if global average temperatures are to remain within safe limits. The Council will look to revising its long term target in line with the new government commitment to reduce national emissions by 80% by 2050.





### 3 Emissions Baseline and Projections

#### 3.1 Scope

In order to know the amount of carbon reductions required the Council first had to quantify how much carbon it actually produced. The LACM stipulated that 2007 was to be the baseline year and that the Council had to comply with the minimum monitoring requirements under NI 185 as set out below:

"NI 185 is to include all CO2 emissions from the delivery of local authority functions. In terms of the meaning of the word in legislation "function" covers both the duties and powers of an authority. It covers all an authority's own operations and outsourced services. Even if the services are being provided by an external body (e.g. a private company) they remain the function of the authority.

The table below shows emissions sources and their status in the Council's CMP.

Category	Status	Comments
Buildings based emissions		
Council offices, LSP, depots	Included	Required under NI185
Leisure Centres, pools	Included	Required under NI185
Car Parks	Included	Required under NI185
Community Buildings	Included	Required under NI185
Transport based emissions		
Employee & Councillor Business	Included	Required under NI185
Employee & Councillor Commute	Excl	uded Not required, poor quality data.
Contractor Business	Included	Required under NI185
DSO and EH Fleet	Included	Required under NI185
Waste Fleet (Contractor)	Included	Required under NI185
Waste based emissions		
Municipal Waste	Excl	Ided Not required, very large emissions would have skewed programme outcomes.
Council and contractor waste	Excl	Ided Poor data, lack of monitoring. <u>Will look improve monitoring and</u> include this in 2009
Water based emissions		
Council and contractor water use	Included	Not required under NI185 but data was available and links with water efficiency measures
Housing based emissions		
Social housing stock	Excl	uded Not required under Ni185. Council has also transferred its stock to an RSL



#### 3.2 Baseline

The baseline year for Carbon Management Programme is the calendar year 2007, This was chosen as it was the nearest year for which it was deemed likely to get a complete set of energy use data. At the time DEFRA guidance stipulated that NI185 monitoring had to be on a calendar basis, this guidance was adopted by the Carbon Trust for the Carbon Management Programme. Subsequently DEFRA have amended the guidance to enable local authorities to choose calendar or financial year. The Vale of White Horse has decided to continue to use calendar year data.

The following baseline data sources were used in the baseline calculation

Category	Source	Owner	Assumptions		
Buildings					
Main Council Office	Meter readings	Property and Estates	Accurate data		
Civic Halls	Utility bills + meter readings	Leisure Facilities + Energy Officer	Estimated readings in some cases		
Other Council buildings	Utility bills	Admin Team and Energy Officer	Estimated readings in some cases		
Leisure Centres	Meter readings	Leisure contractors	Accurate data		
Transport					
Council business mileage	5		Accurate data		
Council public transport	Mileage claims	Transport Engineer + Energy Officer	Accurate data although possibly not complete		
Contractor business	Mileage claims	Contractors (Capita CLS and SOL)	Accurate data		
Waste fleet	Fleet fuel consumption	Waste Contractor Annual report	Accurate fuel use and mileage records		
Council DSL EH fleet	Fleet fuel consumption	Environmental Health and DSO	Accurate fuel use and mileage records		
Water					
Council buildings	cil buildings Utility bills		Accurate data		
Leisure centres	meter readings	Leisure contractors	Accurate data		
Waste fleet	Meter readings	Waste contractor	Accurate data		

The baseline emissions for the Council were calculated by using the DEFRA NI185 emissions tool which had been amended by the Carbon Trust for the purposes of the LACMP. The Council's total 2007 emissions were calculated to 4251 tonnes CO2 and are broken down as follows

	Total	Buildings	Transport	Water
Baseline CO <sub>2</sub> emissions (tonnes)	4,251	2,759	1,467	25
Baseline Cost (£)	£1,208,422	£372,952	£742 781	£92,689

Table 3.2a – Summary table of emissions for baseline year 2007



The Council's emissions are dominated by emissions from buildings (figure 3.3a) and these are in turn dominated by emissions from the Council's leisure centres (figure 3.3b). One leisure centre accounts for 1,300 tonnes of carbon emissions or 1/4 of the Council's total emissions (figure 3.3c). Transport is the other major emissions component; this is dominated by fuel based emissions from the Council's waste contractor which at 1,200 tonnes account for a further 1/4 of the Councils emissions. As a consequence these areas feature heavily in this plan.

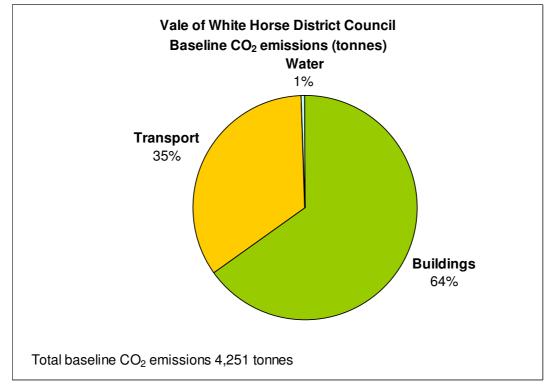


Figure 3.2a Summary of 2007 baseline emissions

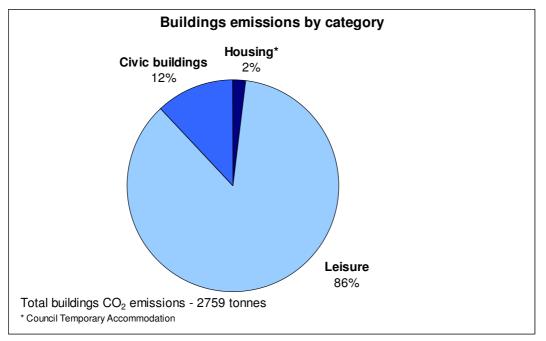


Figure 3.2b Summary of 2007 baseline buildings emissions





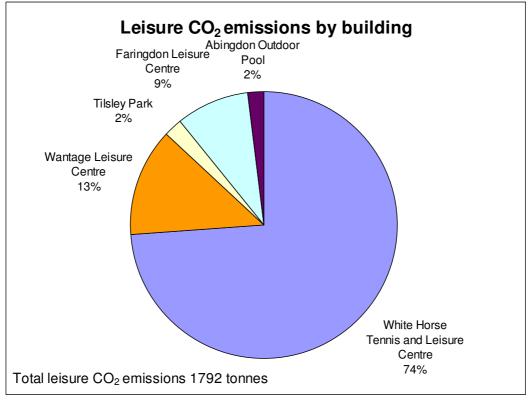


Figure 3.2c Summary of 2007 baseline leisure buildings emissions

#### 3.3 **Projections and Value at Stake**

The LACMP enables the Council to model two different future scenarios. One based on implementing a range of measures to reduce emissions in line with our LACMP target and the other based on the Council adopting a business as usual approach, this is predicated upon some assumptions about future growth in energy use and prices.

#### Business as usual scenario

The business as usual (BAU) projection for  $CO_2$  emissions over a 5 year period has been produced using the baseline toolkit provided by the Carbon Trust. These projections are based on the assumption the Council makes only limited attempts (as we have made in the past) to reduce energy use and even with these attempts would still see energy use rising. The following key assumptions have been made to calculate the BAU scenario, they are based on BER Energy paper 68 and are built into the algorithms of the baseline tool.

- Projected increase in gas and electricity prices of 8.4%
- Projected increase in transport fuel of 8.4%
- Projected increase in energy consumption 0.7% per year
- An increase in transport use of 1.8%

Figure 3.3a below shows the projected increase in  $CO_2$  (the red line) from 4251 tonnes in 2007 to 4402 tonnes by 2012. Figure 3.3b shows the increase in costs (the red line) related to this emissions increase.



#### Reduced emissions scenario

The Council has set an LACMP target to reduce its  $CO_2$  emissions by 20% by 20112/13 against a baseline year of 2007. This averages out at a saving of about 600 tonnes of CO2 a year, starting lower (200) tonnes in 2008 and increasing so the in 2012 the Council will produce 1000 tonnes less carbon than in 2007. Potential actions to achieve this have been set out in section 5, also included are energy saving projects that have occurred in the calendar year 2008.

The graph below shows how emissions are expected to fall (the blue line) as a result of meeting the 20% target

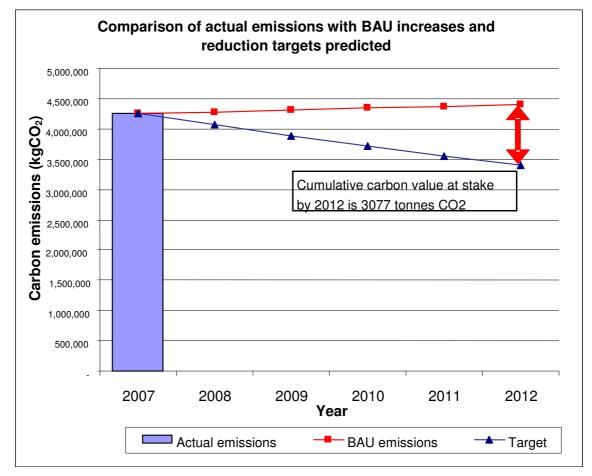


Figure 3.3a Comparison of actual, business as usual and targeted emissions

#### The Value at Stake

The value at stake graphs show the  $CO_2$  emissions and financial cost 'at stake' when comparing the two scenarios. Table 3.3a below highlights how the cost of not doing the LACMP rises over the period of the programme. The carbon and financial value at stake is equivalent to the area between the red and blue lines in figures 3.3a and 3.3b respectively. The cumulative value at stake by 2012/13 is 3,077 tonnes of CO2 and £1,178,911 of avoidable operational revenue cost mainly in the form of fuel and utility bills. Please not this value at stake figure includes fuel and energy savings associated with contracted services such as the leisure and waste contracts.

There is of course a capital cost associated with implementing measures to reduce CO2. More information on this is included in section 5 on Carbon Management Plan Financing.



	2008	2009	2010	2011	2012
Total value at stake in tonnes					
CO2	215	422	622	815	1,001
Cumulative value at stake in					
tonnes CO2	215	638	1,260	2,076	3,077
Total financial value at stake £					
	66,345	141,199	225,433	319,998	425,935
Cumulative financial value at					
stake £	66,345	207,544	432,978	752,975	1,178,911

Table 3.3a Value at stake figures from LACMP Baseline Tool

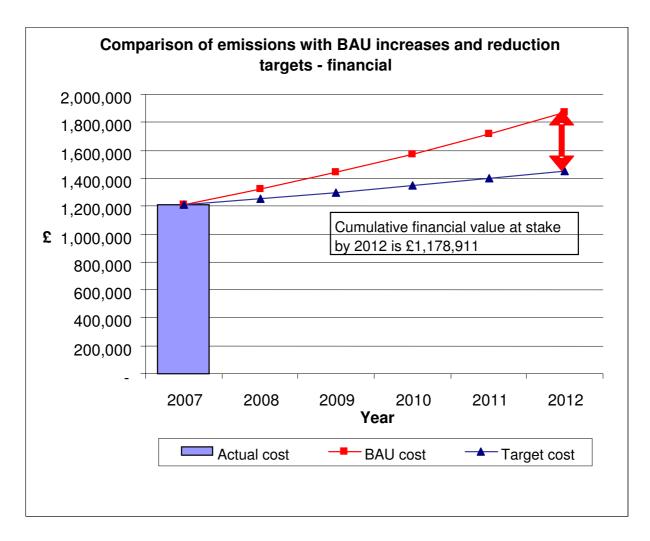


Figure 3.3b Comparison of actual, business as usual and target emissions costs





### 4 Carbon Management Projects

A list of carbon and energy reduction actions have been identified, developed and compiled through a series of workshops with key stakeholders and staff across the Council including key contractors for leisure facilities and waste. Initially this involved producing a long list which via further discussions was refined.

In identifying projects the project team have targeted those areas with the largest emissions. This means a significant proportion of the projected savings will be from leisure centres and the Council's new waste contract. It has also been recognised all parts of the organisation needs to be part of the programme so there has been as attempt to spread projects across a variety of service areas.

The agreed actions have been grouped under 4 categories:

- Existing Projects
- Planned / funded project
- Near Term Projects
- Medium to long term projects
- Other Projects

The tables below show the costs and savings for each project and also the percentage contribution it will make towards council's  $CO_2$  emissions  $CO_2$  reduction target. Each project is described in more detail with a project definition in Appendix B.

#### 4.1 Existing projects

The table below shows those projects that have started in 2008 and will affect the 2007 baseline. Not all were identified as energy saving projects, but have contributed to the carbon reduction target. Not all of these projects will be complete within the calendar year however all have progressed sufficiently for them to be included here.

Ref	Project	Lead		Cost		Annual Saving		Pay	% of	Year
nei	Project	Leau	Cap'l	Rev'ue	Res'ce	Fin	CO <sub>2</sub>	back	Target	Tear
	Voltage Optimisation Abbey House	Property and Estates		16,000		4135	33	3.87	3.3	2008
	Reduce pool temperatures – All pools	Leisure Facilities Manager	-			6000	37	0	3.7	2008
	Lighting Controls Abbey House	Property and Estates		2350		626	5	4	0.5	2008
	Printer Rationalisation	ICT	-			2699	21	0	2.1	2008/9
	Inverters on pool pumps - Faringdon	Leisure Facilities Manager		1500		3400	27	.44	2.7	2008
	Replace Halogen bulbs - Abbey House	Property and Estates		2000		1316	10	1.3	1.0	2008
	Destratification fans in Abbey House	Property and Estates	-			340	3	-	0.3	2008
	Reduced lighting at White Horse Tennis and Leisure Centre	Centre Operator	-			2,040	16	-	1.6	2008/9
	TOTAL			21,850		20,556	152			

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#### 4.2 Planned / funded projects

The projects in the table below are either planned or already have funding earmarked for them. The projects which appear in red are planned for sites which the Council may dispose of in the next 2 years.

				Cost		Annual Saving		Devi	% of	
Ref	Project	Lead	Cap'l	Rev'ue	Res'ce	Fin	tonne CO <sub>2</sub>	Pay back	% of Target	Year
1	Fuel Efficient Driver Training	Waste Contractor		5000		20,000	47	.25	4.7	2009
2	Server Virtualisation Abbey House	ICT	40,000			6391	50	6.26	5.0	2009
3	Business Mileage Reduction (All Council staff and Councillors)	Planning				13,000	8	-	0.8	2009
4	Thin Client Roll- out – Abbey House	ICT	10000			2628	21	Does not	2.1	2009
5	Awareness Campaign 5% (Council wide)	Corporate Policy		2000*		2663	20	.8	2	2009
6	New Waste Contract	Commercial				153000	350	-	35	2010
7	New landscape Contract	Commercial				18,137	41	-	4.1	2010
8	New temporary Accommodation	Property				3460	24	-	2.4	2011
9	Lighting Improvements (Guildhall)	Leisure		600		1360	11	.44 years	1.1	2009
10	Replace 100 CRT screens – Abbey House	ICT		10000		563	4	Does not	0.4	2009
11	Carbon management Policy / function	Corporate Policy		6000*		3800	26		2.6	2009
12	Lighting Efficiency - Abbey House	Property	10500			3264	26	?	2.6	2009 – 2012
13	Timers on MFDs Abbey House	ICT		300		714	6	.2	0.6	2009
	TOTAL		60,500	23,900		228,980	634			

\* Ongoing revenue cost until 2011



#### 4.3 Near term projects

The following table sets out projects which the Council intends to implement. Capital funding is earmarked for all schemes except Project 17, which due to its size and potential complexity would have to be the subject of a separate capital bid.

Ref	Droject	Lead		Cost		Annual Saving		Pay	% of	Year
Rei	Project	Leau	Cap'l	Rev'ue	Res'ce	Fin	CO <sub>2</sub>	back	Target	Tear
14	Pool covers at wet leisure centres	Leisure	45,680			7,887	49	5.79	4.9	2009 2010
15	Variable speed drives at wet leisure centres	Leisure	20455			17,500	138	1.1	13.8	2009 2010
16	Voltage Optimisation Wantage Civic Hall	Property and Estates	7,762			1,192	9	5.5	0.9	2010
17	New boilers / controls for Abbey House	Property and Estates	80,000			3,600	22	Does not	2.2	2011
18	Heating system adjustments in Guildhall and Civic Hall	Property and Estates		2000		1800	11	1.1	1.1	2009
	TOTAL		153,897	2000		31,979	229			

#### 4.4 Medium to long term projects

The following projects are not yet planned in detailed and will need to be subjected to further investigation. The figures in the table below conservative estimates of potential savings based on comparison with similar projects elsewhere or from Carbon Trust best practice guidance.

Ref	Project	Lead		Cost		Annual Saving		Pay	% of	Year
nei	Fioject	Leau	Cap'l	Rev'ue	Res'ce	Fin	CO <sub>2</sub>	back	Target	Tear
	Additional loft Insulation Abbey House	Property and Estates	20,000			1500	9	Does not	0.9	2011
	Voltage optimisation White Horse Tennis and Leisure Centre	Leisure	20,000			8000	63	3	6.3	2012
	Leisure Centre Lighting improvements (All Centres)	Leisure	10,000			5000	30	2	3.0	2011
	Re-draught proof Abbey House	Property and Estates	15,000			1,200	7	8	.8	2011
	TOTAL		65,000			15,700	109			

#### 4.5 Other Projects

These projects are not yet considered to be at the point where detailed investigation and viability can be assessed, all offer significant opportunities for further carbon reduction.

Ref	Project	Lead	Description





Replacement CHP at White Horse Tennis and Leisure Centre	Leisure + Centre operators	In the coming years consideration will need to be given to the eventual replacement of the gas fired CHP unit at the White Horse Tennis and Leisure Centre. Biomass CHP is a possibility.
Further rationalisation of property	Property and Estates	Further joint working between the Vale of White Horse and South Oxfordshire District Councils may present new opportunities to rationalise the use the Councils' combined estates.
Efficiency improvements at Multi-story car park	Property and Estates	This could include installation of more efficient lighting and possibly voltage optimisation equipment.
Guildhall Heating system improvement	Leisure + Property	If the Council retains the Guildhall in the longer term it may be necessary to carryout major improvements to the heating system. Biomass CHP is a possibility.

#### 4.6 Projected achievement towards target

If all the projects in this plan (apart from the projects listed in section 4.5) are implemented, then the Council should reach its 20% emissions reduction target by 2012. The diagram below shows how progress towards the target progresses over the period. If the projects in section 4.5 were also implemented the Council could probably achieve a 25 - 30% reduction in Carbon emissions.

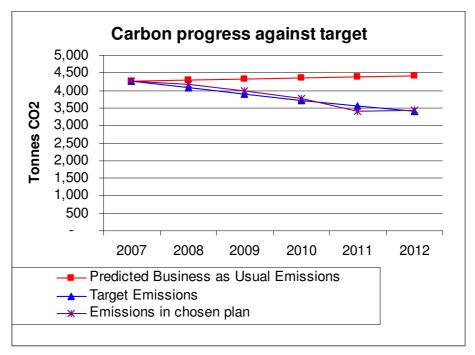


Figure 4.6a Progress towards the Council's Carbon reduction target.

Please note those projects which appear in red will likely happen irrespective of the LACMP. The revenue and capital costs associated with these projects have been written in to the CMP.





### 5 Carbon Management Plan Financing

Funding actions identified in this plan will primarily come from Council capital funding and where appropriate a limited amount of revenure funding, however it is recognised that revenue funding will be much harder to secure. The Council is at the present time unsure whether it will bid for Salix finance for those eligible aspects of this plan. Overall the total cost of this plan for the authority will be approximately £280,000 capital and £64,000 revenue funding over the period. With high and rising energy prices and low rates of return on investments in financial markets investing in energy saving measures offers comparatively high rates of return.

#### 5.1 Assumptions

- Assumption 1- Cost of Electricity and Gas to rise by an average of 8.4% per year for the 5 years until 2012
- Assumption 2 The carbon savings from the new waste contract will come at no additional costs to those that will be agreed in the contract. The financial savings from the new waste contract have been shown for completeness, however they
- Assumption 3 The Council will be able to agree a savings sharing arrangement with leisure contractors and the incumbent waste contractor, thereby securing a return on investments for those projects where the contractor would otherwise incur non of the capital costs but would receive all of the revenue benefits
- Assumption 4 Costs for electricity have been assumed at 6.8p kWh for all sites and 3p kWh for gas

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

	2008	2009	2010	2011	2012
Annual cost saving*	8,500	85,257	103,318	284,215	297,215
Annual CO <sub>2</sub> saving **	112	335 (559)	581 (1140)	970 (2110)	942 (3052)
% of target achieved	3.6	18	37	68	98

\* These are gross figures (revenue costs have not been netted off) and have not been discounted. These figures also include savings that relate to the new waste and landscape contracts. In reality these will show as lower contract costs or efficiency savings that may not be cashable.

\*\*Figures in brackets are cumulative savings.

#### Unquantified benefits:

Implementing the LACMP will obviously deliver a range of other benfits which cannot be measured in money terms. Below is a list of these benefits:

- Complying with LAA2 requirements There may be financial rewards for reaching the LAA2 target. Further information on this is not yet available.
- Enhanced reputation of the Council in demonstrating that it leads by example.
- Lower maintance costs with modern plant installed.
- Greater involvement by all members of staff in implementing the Council's new Climate Change priority.
- Increased awareness amoungst staff, stakeholders and the general public.
- Council being able to exert more influence in other organisations to follow our example.

#### 5.3 Additional resources

The Carbon Management Plan will be delivered within existing resources, There may need to be some re-allocation of job priorities in order to ensure that large critical projects are implemented on scheduale.





The Councill's Principal Energy Officer will take on the primary role of coodinating overall implementation of the plan.

#### 5.4 Financial costs and sources of funding

£	2008/09	2009/10	2010/11	2011/12	2012/13
Annual costs:					
Total annual capital cost	-	75 000	75,000	130,000	-
Total annual revenue cost	21,850	15,900	18,000	8,000	-
Total costs	21,850	90,900	93,000	138,000	-
Committed funding:					
Committed annual capital	-	75,000	75,000	130,000	-
Committed annual revenue	*29850	**20,000	**20,000	**20,000	-
Total funded	29850	95,000	95,000	150,000	-
Unallocated funding					
Proposed additional capital	-	-	-	130,000	-
Unallocated annual revenue	-	-	-	-	-
Total unfunded	-	-	-	130,000	-

Figures above are not subject to a financial discount rate. Please also note the annual totals in this table to not match exactly with the figures in the projects tables in chapter 4 as many projects span more than one year.

\* Revenue from various budgets used to fund measures in 2008/09

\*\* The £20,000 committed revenue is part of the £40,000 annual revenue allocation from the Climate Change Strategy.

#### SALIX Finance

As yet there is no agreement as to whether the Council will bid for Salix funding in 2009. Many projects are compliant or almost compliant and a reasonable Salix bid could probably be made. However the Council is reliant on substantial revenue savings in the next few years and any predicted utility savings from carbon reduction measures could be built into the base budget. This would obviously run counter to a key Salix requirement to establish a revolving fund through which future projects could be financed.

How the Council will treat future revenue savings resulting from the LACMP have not yet been resolved. Should the Council wish to build the revenue savings into future budgets, it will have to allocate a further £130,000 of capital to fully fund the programme.





### 6 Actions to Embed Carbon Management in the Council

Creating a culture of carbon across the Council must be the ultimate aim of the LACM. The Council has used the Carbon Management Embedding Matrix to track its progress. The matrix is included in Appendix A where the white boxes indicate the current position of the Council. Each section below relates to a column in the Matrix. Our aim by the end of the programme is to be at the top of each column.

#### 6.1 Corporate Strategy – embedding CO<sub>2</sub> saving across our organisation

The LACM6 has the full endorsement of the Council's Executive and Senior Management Team and is a central plank in the Council's Climate Change Strategy. This Plan will be published as well as placed on the Council's intranet and website similar to the same way we have published our carbon emissions baseline.

The Carbon saving targets agreed as part of this programme will be published as annual targets in the Corporate Plan. The implementation of the CMP will be managed centrally. All Service Plans already have broad climate change actions within them. These will be further enhanced with specific targeted actions in the 2009 draft service plans.

#### Extract from the Corporate Plan 2008-9

In December 2007 the Council adopted its Climate Change Strategy, an important document that sets out the Council's vision for an appropriate and proportionate response. This strategy will provide the framework for the Council to set about reducing the carbon footprint of its own activities while at the same time establishing the methodology for the Council to work in partnership with others in the District to reduce the carbon footprint of the local community.

This Council recognises the significance of Climate Change and will put tackling this at the heart of its agenda for the next four years. Accordingly the Council will implement a Climate Change Strategy to reduce greenhouse gas emissions and adapt to climate change impacts in the Vale.

#### We Aim to:-

- Tackle the causes of climate change by reducing the amount of greenhouse gases arising directly or indirectly from the Council's operations and to use our local authority powers where possible to influence the actions of others.
- Deal with the effects climate change by adopting an approach to service delivery and Council operations which takes account of the predicted changes in climate and to use our local authority powers where possible to influence others to adapt to climate change.

#### The Council's key objectives for the next four years are to:-

- Implement a carbon management programme to reduce carbon emissions from the Council's operations. The objective for 2008/09 is to establish a baseline assessment and prioritise future actions, to include a review of the Green Travel Plan. This relates to National Indicator 185
- By 2009 implement a sustainable procurement protocol as part of the Council's new Procurement Strategy. This will include reviewing major contracts as and when they are renewed.
- Carry out a Local Climate Impacts Profile to assess the risks posed by future climate change to the Council and its services, and how the Council can effectively manage these risks. This relates to National Indicator 188.
- Use Council powers and influence to reduce per capita CO2 emission. This will be done through enforcement measures associated with emerging planning policies, revised building regulations, reviewing grants / incentives provided through home energy conservation and fuel poverty work, reviewing Council fees and charges. This relates to National Indicator 186.



- Agree and implement a district wide climate change plan through the Vale Partnership and to play an active role in climate change initiatives of the Oxfordshire Partnership.
- Actively promote tackling climate change to the local community.
- Ensure Council strategies are consistent with the aims of the Climate Change Strategy. Of particular relevance is our Waste Management Strategy aim to significantly increase the amount of biodegradable waste recycled, increasing the total percentage recycled to 34 per cent by the end of April 2009

In early 2008 the Vale of White Horse District Council and South Oxfordshire District Council decided to create a shared management team. The aim was twofold. Firstly, to secure significant financial savings which will lead to more resources being available to spend in priority areas, including climate change. Secondly, to create a stronger management team to deliver service improvements and facilitate joint working between the two Councils. More collaborative working with South Oxfordshire District Council on the Carbon Management Programme is one example of such work.

In August 2008 a new Chief Executive was appointed to lead the shared management team for the 2 Councils. For the Vale, one of his first priorities was to start a review of the Corporate Plan and priorities. Following initial discussions with the Executive, draft proposals were subject to wide ranging consultation. A new set of Strategic Objectives and Corporate Priorities were agreed as part of a new Corporate Plan in February 2009. One of the Strategic Objectives is 'Rising to the challenge of climate change'. This is underpinned by 3 corporate priorities and clear targets and actions for improvement. Progress against these targets and actions is reported quarterly as part of a Corporate Governance Reporting process. These reports are considered by the Senior Management team, Executive and Scrutiny Committee. All of these reports can be read on the Council's website.

Specific targets and actions relating to the 'rising to the challenge of climate change' priority are contained in service plans. Progress against Service Plans is reported half yearly to the Executive and Scrutiny Committee.

Service plan targets and actions then feed down into individual appraisals through the 'Commitments' and 'Personal Development Plan' schemes. In this way, all members of staff have a direct link to the Council's Climate Change Strategic Objective.

#### 6.2 Programme Management – bringing it all together effectively

This factor of embedding carbon management covers the operational aspects of delivering the LACMP. Please see section 7 of this plan for more information on this part of the programme.

#### 6.3 Responsibility – being clear that saving CO<sub>2</sub> is everyone's job

Taking action to reduce carbon emissions is every employee's responsibility. Every employee should feel able to challenge current practices if they feel there is a better way of doing things. The following table set out how responsibility for reducing emission is taken across the Council.

All employees	<ul> <li>Staff suggestions scheme – Staff have and will continue to be encouraged to propose energy savings ideas and to take highlight areas where they feel energy is being wasted. They can do this be contacting the Project Team or reporting through the staff suggestion scheme.</li> </ul>
	Annual staff satisfaction and biennial environmental awareness survey.
	Carbon Management raised at quarterly staff briefings and monthly team briefings
	<ul> <li>Climate Change and Carbon Management now part of twice yearly induction training</li> </ul>





	General clause on climate change to go in all job descriptions
	Specific clauses on Carbon management to go in relevant job descriptions
Carbon Champions	• A secondary role for the Climate Change Project Team is act as ambassadors for the LACMP. They are responsible for promoting energy saving within their service area and backing up any promotional work. They are also on hand take staff suggestions and bring them to the Project Team.
Key Staff	<ul> <li>Specific clauses on Carbon management to go in relevant job descriptions.</li> <li>These staff will have responsibility for managing individual projects.</li> <li>Carbon management to be covered as part of personal development plan process.</li> <li>Bespoke briefing / training on project implementation and achieving Carbon savings.</li> </ul>
Senior Management	Targets and actions set for their service areas. Directors and service managers to be responsible for projects in their own service areas.
	<ul> <li>All major projects, plans and policies to be Carbon Impacted Assessed on an annual basis.</li> </ul>
	Carbon Impact Assessment methodology to be devised.
Councillors	All Councillors to receive a briefing on the LACMP and its impacts / benefits.
	<ul> <li>Councillor with the Portfolio for Climate Change is briefed on LACMP progress on a monthly basis. They are responsible for passing progress reports to the leading political group.</li> </ul>
Contractors	• Where possible terms of contract will be changed or improvement plans agreed that will take account of the new actions in the LACMP and acknowledging that contractors will play an active role in securing emissions reductions for the Council.

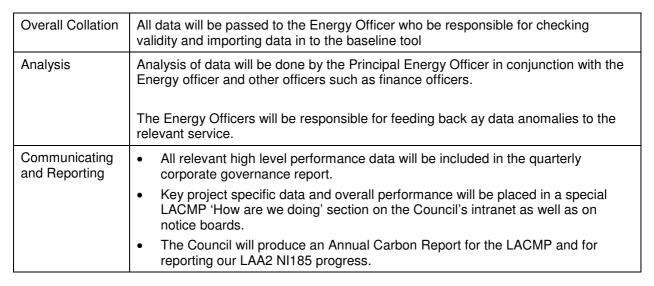
#### 6.4 Data Management – measuring the difference, measuring the benefit

Access to information on energy, fuel, water use and waste is vital to the success of the LACMP and to ensuring compliance with NI185 and LAA2. The following table sets out how data will be handled and who will do it.

Data Collection	• Each service area is responsible for collecting and collating data on energy consumed in delivering their services aside from the central monitoring of main Council buildings. All monitoring to be on a monthly basis or better if possible.
	<ul> <li>Contractors will be responsible for collecting and passing data to client managers on a monthly basis.</li> </ul>
	<ul> <li>Automation of data capture will improve in 2009 with smart metering of all major sites. Mileage data for Council business travel will also be automated in 2009</li> </ul>
	<ul> <li>with the introduction of an electronic mileage claim form.</li> <li>Data collection reviews will take place 6 monthly to ensure all data collection</li> </ul>
	<ul> <li>Project Specific Data Collection – For some projects it will be necessary to</li> </ul>
	monitoring aspects such as phased implementation as well as energy use e.g. phased lighting projects.



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#### 6.5 Communication and Training – ensuring everyone is aware

#### **Communications**

The Council will rely on existing communications channels to relay LACMP information to stakehlders. More information of stakeholder communication and management is included in section 7.4 Ongoing Stakeholder Managerment.

The Head of Communications is part of the Climate Change Project Team so ensures opportunities for communicating with staff and residents are exploited at every opportunity. This includes the following:

- In terms of communication we already have a baseline survey conducted earlier this year which gave us good indicators of what staff were already doing well and where they needed further support. This provided a good starting point and will be repeated at regular intervals (at least every two years) to monitor progress and levels of awareness with respect to the Council's environmental performance.
- Staff will be regularly updated (and already are) about new initiatives and projects as they happen through our monthly staff newsletter The Horse's Mouth. This goes out electronically to all staff and is also available in paper copy on noticeboards. Our other monthly publication, Team Brief, is used as a cascade tool for managers to brief their staff. This is used to instruct staff if they need to do things in a different way, to encourage them to participate in any schemes or projects which may affect them and to encourage team discussions about the issues.
- A new staff intranet site is being developed which will include a special section about the LACMP and other related items, like the Green Travel Plan. This should operational by the end of the year.
- We also hold quarterly staff briefings where the senior management team discusses issues from the previous three months and anything arising in the next three months. Carbon management has already featured in the presentations and will continue to be a recurring subject for discussion and information.
- Any key changes, successes and achievements will be promoted to residents through our residents newsletter Vale Views, which currently comes out three times a year and is delivered to every household in the area. Press releases will also be distributed at key stages or for key projects.
- Special Events and the Vale and South Oxfordshire joint LACMP staff awaness campaign. The Council intends to host a special LACMP launch event to follow on from the Green Office Day held in 2008. This will hightlight to all staff what the programme is and how they can get behind it. Other special events will also be held over the period to ensure momentum and motivation is maintained. Both the Vale and South Oxforshire are also planning to run a joint staff awareness



/ publicity campaign in 2009. More information on this is detailed in Appendix B Project Definition 5

#### Training

In order to ensure all key staff understand the requirments of the LACMP as it moves properly into the implementation phase a short training programme will be developed. The training will cover all aspects of the programme and will be delivered after the formal programme launch in 2009.

Target group	Description
All Empolyees	<ul> <li>Intranet based LACMP and Climate Change awareness training tool</li> <li>Voluntary attendance at LACMP seminar</li> <li>Carbon Management now part of induction training for all new starters</li> </ul>
Senior Management	Special Briefing Sessions ( 2 aleready) and atleast a further 1 on LACMP implementation
Councillors	Special Councillor Briefing in early 2009

#### 6.6 Finance and Investment – the money to match the commitment

This factor of embedding Carbon Management is covered fully in section five of this Plan.

In summary the Council will be using £150,000 of proposed capital expenditure in 2009 and 2010 to fund the most significant projects. A Salix bid could be made in March 2009 to seek match funding for appropriate schemes in order to maximise the leverage of the Council's capital allocation. It will also be necessary to front end load many of the projects reliant on capital funding to mitigate the risk of these projects failing for lack of funding in the future.

Revenue funding will be much harder to secure. For this reason the CMP has been structured to avoid additional revenue costs where possible. The Council recently approved additional revenue funding for the implementation of the Climate Change Strategy. Any additional revenue funding requirements will need to be funded from this source. Where appropriate joint working with South Oxfordshire District Council should enable better use of staff resource e.g. joint staff awareness / communication campaign.

#### 6.7 Policy Alignment – saving CO<sub>2</sub> across our operations

The Council's Climate Change Strategy includes plans to review key policies in the light of both mitigation and adaptation measures. The following table sets out the policy / contract review timetable

Policy / Strategy / Contract	Date reviewed or implemented	Reviewed or implemented by
Procurement (sustainable)	Mid 2009	Principal Energy Officer + Contracts and Procurement
Waste Contract	December 2008	Principal Energy Officer + Contracts and Procurement
Grounds Maintenance Contract	March 2009	Principal Energy Officer + Contracts and Procurement
Home Improvement Agency Contract	January 2009	Principal Energy Officer + Energo Officer
Sustainable Communities Strategy	December 2008 – March 2009	Principal Energy Officer + Contracts and Procurement
Capital projects	Ongoing	

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Travel Plan	Ongoing	Principal Transport Engineer
Planning Policies – SPD	June 2009	DD Planning and Principal Energy Officer
Asset Management Register	-	-
Home Energy Conservation	March 2009	Principal Energy Officer
Energy / Carbon Reduction Policy – see Project Definition 11	Early 2009	Principal Energy Officer





### 7 Programme Management of the CM Programme

In early 2008 the Council established a project team and board according to the PRINCE project management methodology. The Climate Change Project Team is charged with implementing the Council's Climate Change Strategy across the organisation which includes the Carbon Management Programme. The project team reports to the project board which reports to the Senior Management Team. The project team is managing a diverse portfolio of projects including Green Travel Planning, climate change adaptation, communication with staff and most notably Carbon Management. The Vale of White Horse has no central policy or sustainability function; as such it was imperative that a broad team covering all service areas and potential areas of expertise be established to ensure the entire climate change programme could be delivered as cost effectively as possible.

As tackling the causes and effects of climate change is a new Council Priority, it is covered by the Council's corporate governance procedures and the corporate plan. Actions under the climate change priority are set out in the Council's Climate Change Strategy which was approved in December 2007. The Strategy is key corporate document affecting every other strategy and operation of the Council. It has specific actions relating to LACM and the Carbon reduction indicator NI185 is a LAA2 target

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

The Climate Change Project Board acts in overseeing role ensuring the project team delivers the various projects it is responsible for in accordance with the time table set out in the Climate Change Strategy.

#### The Project Board is

Paul Staines – Deputy Director Housing and Community Safety (Chair and Project Sponsor) Mike Mackay – Deputy Director Contracts and Procurement (User representative) Cllr Angela Lawrence – Portfolio Holder for Climate Change (Councillor Champion) Steve Bishop – Strategic Director (Finance Champion for the LACMP only)

With the new shared senior management team between the Vale and South Oxfordshire. It will be necessary to review membership of the project board in early 2009.

#### Project Board Terms of Reference and Reporting

The aim of the Project Board is to ensure that the project remains on course to deliver the required outcome to the appropriate quality within cost and timescale.

The project board meets roughly once every two months. Its keys tasks are to

- Review the work of the project team progress of the programme and any associated risks
- Point out strategic level developments which could affect the Carbon Management Programme
- Feed progress reports through to senior management the board should act as the conduit for information to senior management. Reports are taken to the Senior Management Team or the Executive on as needs basis. Most notably it presented information for the budget setting process to secure capital ear marked for LACM projects in 2009 and 2010. This has resulted in energy savings being built into the base budget giving a very strong impetus for the savings to be realised.
- Remove any obstacles to progress in implementing projects.
- Specifically review progress of the LACM and large projects within it, bearing in mind the board and team are responsible for the entire climate change programme.
- Championing the need for climate change across the organisation

The board will take monitoring reports to the senior management team on a quarterly basis. It will report to the Council's Executive Committee on an as needs basis. It has also prepared information for the budget setting process to secure capital ear marked for LACM projects in 2009 and 2010. This has



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resulted in energy savings being built into the base budget giving a very strong impetus for the savings to be realised

#### 7.2 The Carbon Management Team – delivering the projects

The Council established the Project Team in April 2008 prior to the launch of the LACMP. The team's primary responsibility is to implement the Council's Climate Change Programme. The Project Team is a group of officers with the appropriate skills to deliver, oversee or assist with the delivery of the various aspects of the programme, including tangible aspects, research, measures and reports.

#### Implementing the Council's Climate Change Strategy

The Council's Climate Change Strategy has two key aims, both aims relate only to the Council's operation:

- 1. To tackle the causes of climate change i.e. reduce the Council's greenhouse gas emissions
- 2. To deal with the effects of climate change ensure the Council can cope with the climatic extremes likely to be brought about by climate change.

The strategy is a corporate priority and many of the actions in the strategy are cross cutting and affect virtually every service area. As a result it was considered vital that a corporate team of officers should be established in order to ensure that;

- due prominence is given to this new priority,
- progress is properly monitored,
- corporate actions are delivered consistently, and
- key officers have a forum for discussing issues.

#### Areas of work

The Climate Change Project Team will be responsible for delivering and/or overseeing the following aspects of the Council's approved Climate Change Strategy.

- Assisting with communicating the strategy to staff.
- Acting as the representative for respective service areas on relevant corporate climate change initiatives and to act as the main climate change contact within respective service areas.
- Assisting with the delivery of the Carbon Management Programme and implementing any relevant actions that flow from it.
- Assisting with the production of a Local Climate Impacts Profile for the Council and implementing any actions that flow from it.
- Feeding into the review of the Council's Travel plan
- Assisting with the planned expansion of Council in-house recycling.
- Reporting back on any specific actions
- Keeping an overview of climate change implications for respective service areas.
- Acting as a 'think tank' for other Council climate change actions.
- Taking an overview of progress of projects?

#### **Meetings**

The Project Team meets on a monthly basis. It may be necessary for smaller sub-groups to meet on a more regular basis to drive forward specific actions such the LACMP

It is proposed that meetings last no longer than 2 hours. It will be the responsibility of the Team Leader to organise meetings and agendas.

#### **Representation**



Each service area should be represented by at least one person on the Project Team. In most cases this person will also be directly involved in delivering a specific climate change action/project.

The Climate Change LACMP Project Team is

Mark Saunders Principal Energy Officer - Team Leader and LACM Project Team Leader Gordon Willcox Transport Engineer - LACMP Deputy Project Leader Cynthia Sullivan Energy Officer - LACMP Deputy Leader Robert Woodside - Performance Management Nikki Malin – Communications Manager Ian Thompson – ICT Tim Williams – Environmental Health Grant Audley-Miller – Planning Strategy Officer Len Rodway / Peter Dela – Estates Managers Chris Webb – Leisure Facilities Manager

#### Reporting

The 'Project Team' reports to the 'Project Board'. The Project Team also proposes to produce a six monthly report the first of which will be presented to SMT in October in time for the beginning of the budget setting process.

#### 7.3 Succession planning for key roles

<u>Project Leader</u> – Under the LACM the Project Leader has appointed two deputy leaders to cover both the technical and managerial aspects of the project leader role. In the event of the PL being unable to lead the Programme the two deputy leads would succeed to the lead role.

<u>Project Sponsor</u> – Under the LACM there is no deputy sponsor. In the event the PS was unable to continue in this role, the succession plan would be for the user representative on the Project Board to become the new PS.

It should also be noted that from February 2009 the Vale of White Horse and South Oxfordshire District Councils (also in LACM6 with the Vale) will have a shared Senior Management Team. This will mean the same person will be the LACM6 project sponsor for both Councils. Both Councils will remain separate entities so it is likely there will still have to be two project teams and boards. This may create some as yet unforeseen management difficulties with one person having a critical role in both organisations.

#### 7.4 Ongoing stakeholder management

Implementing the CMP will involve engaging with a larger number of individuals, groups and committees. The table below sets out how each of these stakeholders will be engaged throughout the implementation of the CMP

Individual or Group	Influence	Impact	Their interest or issues	Means of Communication
David Buckle Chief Executive	Н	Н	Overall scheme management and delivery against Corporate Plan	Senior Management Team (SMT) reports and presentations

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			targets	
Steve Bishop			cost / budgets	Kept informed via SMT and on an
Finance Director			Under pressure to make revenue savings	as needs basis. Member of Project Board.
Councillors	H	L	Reducing emissions (cost reduction is an additional benefit) Delivery against Corporate Plan targets	Occasional meetings with leader of the Council. All councillors can be reached via Councillor's Information newsletter. Special Councillor Briefing / Training session
Councillor Angela Lawrence (Portfolio Holder and Political Sponsor)	Н	М	Reducing costs and emissions. Political representation	Meetings and informal contact with portfolio holder. Meetings with Project Board.
Paul Staines (Project Sponsor)	Н	Н	Ensuring the programme is implemented with maximum support in a time efficient way. Ensuring CMP has sufficient profile.	Two weekly meetings and regular informal contact.
Senior Management Team	H	H	Service delivery and cost reduction. May be heavily preoccupied with possible merger with South Oxfordshire DC. Delivering CMP projects at service level.	Reports to SMT from Project Board.
Property and Estates Team	Η	Η	Facilities & property management. Small team with limited means to monitor and reduce Council energy consumption.	Mostly informal with occasional meetings. Represented on Project Team. Important to keep the team involved. Implementation of many projects will depend on them.
Leisure Facilities Operators and Client Manager	H	М	Leisure centre management, reducing running costs and carbon emissions, maximising utilisation. Very willing to be involved, there maybe some issues over who reaps the financial benefits of any energy efficiency measures funded by the Council, where the utility bills are paid by the contractor.	Mostly informal contact with Leisure Facilities Manager. Represented on Project Team. Important to keep Leisure Centre Operators involved. Implementation of many projects will depend on them. Leisure Facilities Manager has regular meetings operators where CMP issues can be discussed
Waste Contractor and Client Manager	М	L	Delivering the contract, maximising recycled content of waste collected, reducing fleet running costs. Only 18 months left to run on the contract, may pose some problems with efficiency improvements which pose significant changes to the current contract.	Mostly informal contact with Waste Services Manager who has direct contact with the contractor. Not represented on Project Team New Waste Contract has provided an excellent opportunity to influence emissions targets for the new contract. Dialogue to be opened



				with winning contractor
ICT Team	Η	Μ	Efficient use of IT resources, better system capability, lower running costs. Very keen to investigate major projects such as virtualisation and large scale thin client roll-out. Salix funding an attractive proposition	Mostly ad hoc meetings to discuss issues. Represented on Project Team.
Organisational Management and Support	L	М	Project, performance and communications management expertise available for Council projects. Efficiency in Council operations	Ad hoc. The CMT has access to assistance from this team. Represented on CMT

**Influence**: the level of influence on the successful outcome of the Programme - High (H), Medium (M) or Low (L) **Impact**: the level of impact that the Project will have on the person or group - High (H), Medium (M) or Low (L)

#### 7.5 Annual progress review

Implementation of actions under the LACMP will be monitored on a quarterly basis in accordance with the agreed methodology set out under LAA2 for NI185. This monitoring will also be part of the Council's quarterly corporate governance reporting process. Monitoring will cover the following

- financial savings against targeted savings
- Fuel, Energy and CO2 savings against targets
- less quantifiable benefits, such as influencing the local community (supporting NI186), staff awareness,
- Specific monitoring of large projects whose implementation is critical to the Council achieving its emissions reduction targets e.g. implementation of the joint waste contract, large projects at leisure centres etc

All relevant contracts will require this monitoring information to be supplied on a quarterly basis.

Each year the Council will produce an Annual Carbon Report detailing all the carbon reduction actions undertaken and their outcomes. This report will be used to report LAA2 and LACMP progress in future years. It has been decided for the purpose of the CMP that the Council will switch to financial year reporting to be consistent with other review and scrutiny procedures.



## Appendix A: Carbon Management Matrix - Embedding

	CORPORATE STRATEGY	PROGRAMME MANAGEMENT	RESPONSIBILITY	DATA MANAGEMENT	COMMUNICATION & TRAINING	FINANCE & INVESTMENT	POLICY ALIGNMENT *
best 5	<ul> <li>Top level target allocated across organisation</li> <li>CO<sub>2</sub> reduction targets in Directorate Business Plans</li> </ul>	<ul> <li>Cabinet / SMT review progress against targets on quarterly basis</li> <li>Quarterly diagnostic reports provided to Directorates</li> <li>Progress against target published externally</li> </ul>	<ul> <li>CM integrated in responsibilities of senior managers</li> <li>CM part of all job descriptions</li> <li>Central CO<sub>2</sub> reduction advice available</li> <li>Green Champions leading local action groups</li> </ul>	<ul> <li>Quarterly collation of CO<sub>2</sub> emissions for all sources</li> <li>Data externally verified</li> <li>M&amp;T in place for: <ul> <li>buildings</li> <li>street lighting</li> <li>waste</li> </ul> </li> </ul>	<ul> <li>All staff given formalised CO<sub>2</sub> reduction:         <ul> <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> <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> <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>
4	<ul> <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> <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> <li>CM integrated in to responsibilities of department heads</li> <li>Cabinet / SMT regularly updated</li> <li>Staff engaged though Green Champion network</li> </ul>	<ul> <li>Annual collation of CO<sub>2</sub> emissions for:         <ul> <li>buildings</li> <li>street lighting</li> <li>transport</li> <li>waste</li> </ul> </li> <li>Data internally reviewed</li> </ul>	<ul> <li>All staff given CO<sub>2</sub> reduction:         <ul> <li>induction</li> <li>communications</li> <li>CM matters communicated to external community</li> </ul> </li> </ul>	<ul> <li>Coordinated financing for CO<sub>2</sub> reduction projects via Programme Board</li> <li>Finances committed 1yr ahead</li> <li>Some external financing</li> </ul>	<ul> <li>Comprehensive review of policies complete</li> <li>Lower level policies reviewed locally</li> <li>Unpopular changes being considered</li> </ul>
3	<ul> <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> <li>Core team regularly review CM progress:         <ul> <li>actions</li> <li>profile &amp; targets</li> <li>new opportunities</li> </ul> </li> </ul>	<ul> <li>An individual provides full time focus for CO<sub>2</sub> reduction and coordination across the organisation</li> <li>Senior Sponsor actively engaged</li> </ul>	<ul> <li>Collation of CO<sub>2</sub> emissions for limited scope i.e. buildings only</li> </ul>	<ul> <li>Environmental / energy group(s) given ad hoc:         <ul> <li>training</li> <li>communications</li> </ul> </li> </ul>	<ul> <li>A view of the cost of CO<sub>2</sub> reduction is developing, but finance remains adhoc</li> <li>Some centralised resource allocated</li> <li>Finance representation on CM Team</li> </ul>	<ul> <li>All high level and some mid level policies reviewed, irregularly</li> <li>Substantial changes made, showing CO<sub>2</sub> savings</li> </ul>
2	<ul> <li>Draft Climate Change Policy</li> <li>Climate Change references in other strategies</li> </ul>	Ad hoc reviews of CM actions progress	<ul> <li>CO<sub>2</sub> reduction a part- time responsibility of a few department champions</li> </ul>	<ul> <li>No CO<sub>2</sub> emissions data compiled</li> <li>Energy data compiled on a regular basis</li> </ul>	<ul> <li>Regular awareness campaigns</li> <li>Staff given CM information on ad-hoc basis</li> </ul>	<ul> <li>Ad hoc financing for CO<sub>2</sub> reduction projects</li> </ul>	<ul> <li>Partial review of key, high level policies</li> <li>Some financial quick wins made</li> </ul>
1 Worst	<ul> <li>No policy</li> <li>No Climate Change reference</li> </ul>	No CM monitoring	<ul> <li>No recognised CO<sub>2</sub> reduction responsibility</li> </ul>	<ul> <li>No CO<sub>2</sub> emissions data compiled</li> <li>Estimated billing</li> </ul>	No communication or training	<ul> <li>No specific funding for CO<sub>2</sub> reduction projects</li> </ul>	<ul> <li>No alignment of policies for CO<sub>2</sub> reduction</li> </ul>

• Major operational policies and procedures, e.g. Capital Projects, Procurement, HR, Business Travel

White boxes indicate the current position of the Council.





# Appendix B1 Carbon Management Programme: Project Definition

Project:	VWHDC 1 - Safe and Fuel Efficient Driver (SAFED) Training
Reference:	
Owner (person)	Dave Wilson, Council – Tony Birch, Veolia
Department	Waste contract – Contracts and Procurement
Description	SAFED driver training for all waste and recycling fleet HGV drivers
Benefits	<ul> <li>Financial savings: £ 18,000 – £24,000 per year</li> <li>Payback period: 0.2 years</li> <li>CO<sub>2</sub> Emissions reduction: 47 tonnes of CO<sub>2</sub></li> <li>kWh saving 189,000</li> </ul>
Funding	<ul> <li>£5000 to train all 30 HGV drivers</li> <li>Climate Change Revenue Budget for 2009</li> <li>Funding decision made October 08.</li> </ul>
Resources	<ul> <li>Additional resource:. As this is on the job training there should be minimum disruption to normal collection rounds. The Contractor has agreed to cover any additional wages costs and contribute towards an incentive scheme</li> <li>This project will be delivered within current resources</li> </ul>
Ensuring Success	<ul> <li>Key success factors         <ul> <li>All drivers to put training into practice encouraged by crew incentive scheme,</li> </ul> </li> <li>Principal risks:         <ul> <li>Insufficient drivers trained – May need to schedule training over a number of months to counter this.</li> <li>Automatic vehicles may not generate anticipated savings. The figures in this definition are deliberately cautious for this reason</li> </ul> </li> </ul>
Measuring Success	<ul><li>MPG and total fuel use data</li><li>Measured using onboard metrics and refuelling data</li></ul>
Timing	<ul> <li>Milestones / key dates e.g.</li> <li>start of implementation – Jan – March 2009</li> <li>when it will deliver savings – Mid 2009</li> </ul>
Notes	





# Appendix B2 Carbon Management Programme: Project Definition

Project:	VWHDC2 – Server Virtualisation
Reference:	
Owner (person)	Ann Sadler
Department	ICT – Project Manager Nicholas Thomas
Description	Implementation of virtual server technology at main Council office. Reducing number of CPUs by 50% and making a corresponding reduction in air conditioning requirement.
Benefits	Financial savings: £ 6,391
	Payback period: 6.23 years
	<ul> <li>CO<sub>2</sub> Emissions reduction: 50 tonnes of CO<sub>2</sub></li> </ul>
	• <i>kWh savings 70,492</i> for servers and 23,497 for reduced air con.
Funding	Indicative figure for server virtualisation are £40,000
	Source of funding: ICT upgrade budget and possible Salix Finance if the project can be amended in order to meet Salix investment criteria.
	The decision to fund will be taken in February 09
Resources	This project will be delivered within current resources
Ensuring Success	<ul> <li>Key success factors         <ul> <li>Possibly linked to a successful Salix bid</li> <li>Redundant CPUs are decommissioned.</li> </ul> </li> <li>Principal risks:         <ul> <li>Scheme not Salix compliant or Salix bid not made or not successful.</li> <li>Project is not driven by carbon reduction and may therefore not secure all potential emissions savings.</li> </ul> </li> </ul>
Measuring Success	<ul> <li>Metrics for displaying performance or achievement         <ul> <li>The Uninterruptible Power Supply can be monitored to give an accurate reading for power consumption in the server room.</li> </ul> </li> <li>When success will be measured         <ul> <li>Regular monitoring of UPS</li> </ul> </li> </ul>
Timing	<ul> <li>Milestones / key dates e.g.</li> <li>decision points – funding and project go ahead Feb</li> <li>start of implementation – Mid 2009</li> <li>when it will deliver savings - 2010</li> </ul>
Notes	





# Appendix B3 Carbon Management Programme: Project Definition

Project:	VWHDC 3 - Business Mileage Reduction
Reference:	
Owner (person)	Gordon Willcox – Transport Planner
Department	Planning
Description	The Council proposes to reduce its business mileage (currently in excess of 250,000 miles per year) by setting a target to reduce business mileage by at least 10% for all service areas in 2009.
Benefits	Financial savings: £ 13,000
	Payback period: -
	• CO <sub>2</sub> Emissions reduction: 37 tonnes of CO <sub>2</sub>
Funding	No capital or revenue costs required
Resources	• This project will be delivered within current resources.
Ensuring Success	<ul> <li>Key success factors         <ul> <li>Each service area will need to have business mileage reduction as a service objective with appropriate sanctions for failure.</li> </ul> </li> <li>Principal risks:         <ul> <li>Staff fail to reduce mileage.</li> <li>Could affect staff morale, especially for those who submit large mileage claims.</li> </ul> </li> </ul>
Measuring Success	<ul> <li>Metrics for displaying performance or achievement         <ul> <li>Electronic mileage claims will enable information to be feedback to staff every month</li> </ul> </li> <li>When success will be measured / evaluated         <ul> <li>Monthly and in Carbon Annual Report</li> </ul> </li> </ul>
Timing	<ul> <li>Milestones / key dates e.g.</li> <li>decision points – Target in draft service plans Feb 09</li> <li>start of implementation – April 09</li> <li>when it will deliver savings – end 09</li> </ul>
Notes	





# Appendix B4 Carbon Management Programme: Project Definition

Project:	VWHDC 4 – Thin Client (dumb terminal) role out
Reference:	
Owner (person)	Ian Thompson
Department	ICT
Description	Currently most staff have their own PC which is connected to the network. However many staff do not need the capability of a PC and would be better served with a dumb terminal giving access to the network and basic applications. Dumb terminals are a solid state device which uses a fraction of the power of a PC. It has been identified that about 100 PCs could be replaced in this way.
Benefits	• Financial savings: £ 2,628
	Payback period: 3.8 years
	<ul> <li>CO<sub>2</sub> Emissions reduction: 21 tonnes of CO<sub>2</sub></li> </ul>
Funding	This project is estimated to cost about £10,000
	Source of funding: CMP capital funding
	• Funding decision – Funds earmarked in capital programme.
Resources	• £10,000 capital funding required.
Ensuring Success	<ul> <li>Key success factors         <ul> <li>Old PCs need to be taken out of use.</li> </ul> </li> <li>Principal risks         <ul> <li>Major office move and restructure in 2009 results in the project being given a low priority.</li> </ul> </li> </ul>
Measuring Success	<ul> <li>Metrics for displaying performance or achievement         <ul> <li>Information from ICT on numbers deployed</li> <li>Provide information to staff on the advantages of the project</li> </ul> </li> <li>When success will be measured / evaluated         <ul> <li>Project will be reviewed at the end of 2009 to assess overall effectiveness</li> </ul> </li> </ul>
Timing	<ul> <li>Milestones / key dates e.g.</li> <li>decision points – decision already made</li> <li>start of implementation - 2009</li> <li>When it will deliver savings – Upon project completion.</li> </ul>
Notes	





# Appendix B5 Carbon Management Programme: Project Definition

Project:	VWHDC 5 - Staff Awareness Campaign
Reference:	Viribo o - otan Awarchess oampaign
Owner (person)	Mark Saunders
Department	Corporate Policy
Description	A targeted campaign to get staff to reduce avoidable energy consumption involving poster, e-mail messaging, green office days and possibly an energy saving competition between staff at the Vale and South Oxfordshire District Councils.
Benefits	<ul> <li>Financial savings: £ 1500</li> <li>Payback period: 1.3 years</li> <li>CO<sub>2</sub> Emissions reduction: 20 tonnes of CO<sub>2</sub></li> <li>kWh saving 50,000</li> </ul>
Funding	<ul> <li>£2,000 operational costs to fund a shared campaign with South Oxfordshire District Council</li> <li>Funded from Climate Change Communication budget</li> <li>Funding decision made.</li> </ul>
Resources	This project will be delivered within current staff levels.
Ensuring Success	<ul> <li>Key success factors         <ul> <li>Ongoing commitment to continued campaigning. This would be built around a 4 year programme with different messages to keep the campaign fresh</li> <li>Ability to keep staff motivated.</li> </ul> </li> <li>Principal risks:         <ul> <li>Staff awareness campaign gets associated with general cost cutting measures and fails to inspire staff.</li> </ul> </li> </ul>
Measuring Success	<ul> <li>Metrics for displaying performance or achievement         <ul> <li>Monitoring PCs left on, electricity consumption, Business mileage.</li> <li>Carbon reduction counter will be in the Council's intranet to enable staff to view actual progress</li> </ul> </li> <li>When success will be measured / evaluated         <ul> <li>Monthly</li> </ul> </li> </ul>
Timing	<ul> <li>Milestones / key dates e.g.</li> <li>Decision points – Devise campaign in early 2009</li> <li>Start of implementation – launch March 2009 with CMP launch</li> <li>When it will deliver savings – Immediately.</li> </ul>
Notes	





## Appendix B6 Carbon Management Programme: Project Definition

Project:	VWHDC 6 – New Waste Contract				
Reference:					
Owner (person)	Dave Wilson				
Department	Waste Management				
Description	The Council is currently tendering for a new waste contractor to collect general, compost and recyclable waste in the district from 2010. The new contract offers opportunities to generate carbon savings compared to the emissions of the current contract. All prospective contractors will have to make at least a 30% emissions savings based on current baselines.				
Benefits	<ul> <li>Dependent on option taken by winning contract – assume financial savings: £ 171,000 on diesel costs.</li> </ul>				
	• Payback period: 0 years – As this is a new contract opportunities have been taken to specify emissions reduction targets which have been built into the contract tender process. For this reason the additional cost of delivering CO2 savings have not been quantified.				
	• CO <sub>2</sub> Emissions reduction: 343 tonnes of CO <sub>2</sub> .				
Funding	• As these savings are integral to the new contract, funding measures will be structured into the contract price.				
	<ul> <li>Appointment of new contractor will be in December 2008. The new contract will commence in March 2009 for South Oxfordshire and Marc 2010 for the Vale of White Horse</li> </ul>				
Resources	• There will be no additional resources required to deliver the carbon savings stated apart from those that will be specified in the new contract.				
Ensuring Success	<ul> <li>Purchase of new Euro 5 fleet, Move to fortnightly collection, use of bio diesel mix or PPO, onboard vehicle routing software and management systems</li> <li>Principal risks: Fleet does not switch to bio-diesel / PPO due to high matrice final event.</li> </ul>				
••• ·	relative fuel cost. Council is forced to change collection frequencies.				
Measuring Success	Quarterly contract management meetings				
	<ul> <li>Monthly reporting of emissions to the Council</li> <li>Annual reporting – The Council's Annual Carbon Report</li> </ul>				
Timing	Milestones / key dates e.g.				
	<ul> <li>decision points – Appointment of new contractor</li> </ul>				
	<ul> <li>start of implementation – March 2010</li> <li>when it will deliver savings – Immediately</li> </ul>				
Notoo	when it will deliver savings – Immediately.				
Notes	A switch to 70%PPO use would lead to a much greater reduction in emissions; however for the purposes of the CMP it has been assumed the contractor will only meet the 30% emissions reduction target in the tender.				





## Appendix B7 Carbon Management Programme: Project Definition

Project:	VWHDC 7 – New Landscape Contract				
Reference:	Winder - New Landscape Contract				
Owner (person)	Ian Matten				
Department	Parks and Landscapes				
· ·					
Description	The Council is will soon be tendering for a new landscaping contract to provide landscaping services in the district from 2010. The new contract offers opportunities to generate carbon savings compared to the emissions of the current contract. All prospective contractors will have to demonstrate at least a 30% emissions savings based on current baselines.				
Benefits	• Financial savings: £ 18,137				
	• Payback period: 0 years – As this is a new contract, opportunities will be taken to specify emissions reduction targets which will be built into the contract tender process. For this reason the additional cost of delivering CO2 savings have not been quantified				
	<ul> <li>CO<sub>2</sub> Emissions reduction: 41 tonnes of CO<sub>2</sub></li> </ul>				
Funding	• As these savings are integral to the new contract, funding measures will be structured into the contract price.				
Resources	• There will be no additional resources required to deliver the carbon savings stated apart from those that will be specified in the new contract				
Ensuring Success	<ul> <li>Key Success factors         <ul> <li>Purchase of new fleet, use of bio diesel mix or PPO.</li> <li>Drier summers could result in less fuel use</li> <li>Council has policies in place which will result in contractor using less fuel</li> </ul> </li> <li>Principal risks:         <ul> <li>Fleet does not switch to bio-diesel / PPO due to high relative fuel cost. Adaptation to climate</li> </ul> </li> </ul>				
Measuring	Quarterly contract management meetings				
Success	<ul> <li>Monthly reporting of emissions to the Council</li> </ul>				
	Annual reporting – The Council's Annual Carbon Report				
Timing	<ul> <li>Milestones / key dates</li> <li>decision points – specification for tender agreed March 2009</li> <li>start of implementation – March 2010</li> <li>when it will deliver savings – At the start of the new contract</li> </ul>				
Notes					





## Appendix B8 Carbon Management Programme: Project Definition

Project: Reference:	VWHDC 8 - Harcourt Way Temporary Accommodation Development (Property Rationalisation)				
Owner (person)	Len Rodway				
Department	Property and Estates				
Description	Replacement of old temporary accommodation units with a new building built to level 4 of the Code for Sustainable Homes.				
Benefits	<ul> <li>Financial savings: £ 1,600 compared with current accommodation</li> <li>Payback period: 0 years</li> <li>CO<sub>2</sub> Emissions reduction: 24 tonnes of CO<sub>2</sub></li> </ul>				
Funding	• The development will cost 1.4 million to construct. This will be part of the social housing provision for a larger redevelopment.				
	• The scheme is being funded via the Council accepting a reduced land value for the main development site and utilising land it already owns. The Council will also be seeking grant assistance for some aspects of the scheme.				
	• The scheme has already received planning consent and is due to be completed before 2012 and ideally earlier				
Resources	• Some additional input from officers in providing detailed spec etc, but this will be provided within current resources.				
Ensuring Success	<ul> <li>Key success factors.         <ul> <li>Final specification agreed</li> </ul> </li> <li>Principal risks:             <ul> <li>Recession and property down turn result in development being delayed or shelved.</li> </ul> </li> </ul>				
	<ul> <li>Costs escalate, reducing amount of energy saving measures installed.</li> </ul>				
Measuring Success	<ul> <li>Metrics for displaying performance or achievement         <ul> <li>Smart metering will be installed to enable Council staff to monitor building performance.</li> </ul> </li> <li>When success will be measured / evaluated</li> </ul>				
	<ul> <li>Completed development delivers actual savings</li> </ul>				
Timing	<ul> <li>Milestones / key dates e.g.</li> <li>decision points – final decision to proceed has been agreed</li> <li>start of implementation – still subject to developer negotiations</li> <li>when it will deliver savings – Once fully occupied</li> </ul>				
Notes	Carbon Saving figures taken from Cyril Sweet report 'A Cost Review of the Code for Sustainable Homes'				





## Appendix B9 Carbon Management Programme: Project Definition

Project:	VWHDC 9 – Lighting Improvement Guildhall					
Reference:						
Owner (person)	Chris Webb					
Department	Which part of the organisation the project sits within					
Description	Replacement of tungsten filament lamps in chandeliers and decorative lights with compact fluorescent lamps.					
Benefits	<ul> <li>Financial savings: £ 1,360</li> <li>Payback period: 0.44 years</li> <li>CO<sub>2</sub> Emissions reduction: 11 tonnes of CO<sub>2</sub></li> </ul>					
Funding	<ul> <li>£600 - £1000</li> <li>Source of funding: Climate Change Capital funding bid</li> <li>Funding decision will be taken in Feb 09</li> </ul>					
Resources	No additional resources required					
Ensuring Success	<ul> <li>Key success factors         <ul> <li>Key success factors</li> <li>Principal risks:</li> <li>Building is listed and the Council's Conservation Planner may find CFL alternative not suitable</li> </ul> </li> </ul>					
Measuring Success	<ul> <li>Metrics for displaying performance or achievement         <ul> <li>Monthly reporting to Leisure Facilities Manager</li> </ul> </li> <li>When success will be measured / evaluated         <ul> <li>Annual Carbon Report</li> </ul> </li> </ul>					
Timing	<ul> <li>Milestones / key dates e.g.</li> <li>decision points – Funding decision in March 2009</li> <li>start of implementation – early 2009</li> <li>when it will deliver savings – Upon completion</li> </ul>					
Notes	It is possible that the Guildhall will be sold or its ownership transferred to a Trust. The Council does not intend to retain any further involvement in the management of this facility after 2010/11. In which case this building would not be part of the Council's baseline and any measures installed would not count towards the Council's target					





# Appendix B10 Carbon Management Programme: Project Definition

Project:	VWHDC 10 – CRT Screen replacement				
Reference:					
Owner (person)	Ian Thompson				
Department	ICT				
Description	Replacement of 100 remaining CRT screens with LCD screens				
Benefits	Financial savings: £ 563				
	Payback period: Does not payback				
	CO <sub>2</sub> Emissions reduction: 4 tonnes of CO <sub>2</sub>				
Funding	This project would have happened and there are no additional costs     associated with upgrading to LCD screens.				
	Funding for this project comes from ICT budgets.				
	Decision to fund has been made				
Resources	• This project will be delivered within current resources.				
Ensuring Success	<ul> <li>Key success factors</li> <li>Principal risks:         <ul> <li>No real risks associated with this project.</li> <li>LCD screen produce less heat which will have to be provided by the heating system. For 100 screens this could be 30,000 kWh of additional heat input required</li> </ul> </li> </ul>				
Measuring Success	<ul> <li>Metrics for displaying performance or achievement         <ul> <li>ICT to supply installation numbers</li> <li>Link to periodic monitor surveys (checks to see how many PCs and monitors are left on.</li> </ul> </li> <li>When success will be measured / evaluated         <ul> <li>When Council has removed its last CRT screen</li> <li>Annual Carbon Report</li> </ul> </li> </ul>				
Timing	<ul> <li>Milestones / key dates</li> <li>decision points - decision already made</li> <li>start of implementation – early 2009</li> <li>when it will deliver savings – as and when screens are installed</li> </ul>				
Notes	Information taken from Royal Borough of Windsor and Maidenhead CMP				





## Appendix B11 Carbon Management Programme: Project Definition

Project: Reference:	VWHDC 11 – Carbon Management Policy / Function				
	Mark Saundara				
Owner (person)	Mark Saunders				
Department	Corporate Policy				
Description	<ul> <li>The Council does not have a policy on energy use or a dedicated role that is responsible for enacting energy and emissions reduction measures. This omission was highlighted at a Carbon Trust survey of the Council in March 2009. Key actions to implement include.</li> <li>Produce an energy policy</li> <li>Improve M&amp;T through regular and smart metering</li> <li>Set up energy champions</li> <li>Put in place energy management procedures</li> </ul>				
Benefits	• Financial savings: £ 6,032				
	Payback period: 0.3 years				
	<ul> <li>CO<sub>2</sub> Emissions reduction: 45 tonnes of CO<sub>2</sub></li> </ul>				
Funding	Estimated cost of additional work required - £6000				
Resources	• The Principal Energy Officer has allocated an additional I day per week to cover additional Carbon Management issues including this project. The additional cost of the project has already been budgeted for.				
Ensuring Success	<ul> <li>Key success factors         <ul> <li>Smart metering installed in all appropriate site</li> <li>New policy adhered to</li> </ul> </li> <li>Principal risks:         <ul> <li>Principal Energy Officer does not have enough time to devote to delivering this project</li> </ul> </li> </ul>				
Measuring	Metrics for displaying performance or achievement				
Success	<ul> <li>Regular feedback to staff on energy management issues</li> </ul>				
	<ul> <li>Access to Carbon Counter on Council intranet to show progress towards target</li> </ul>				
	When success will be measured / evaluated				
	<ul> <li>Monthly meter readings from all sites</li> </ul>				
	<ul> <li>Annual Carbon Report</li> </ul>				
Timing	<ul> <li>Milestones / key dates         <ul> <li>decision points – Role already allocated as part of climate change function.</li> <li>start of implementation – March 2009</li> <li>when it will deliver savings – From 2009 onwards</li> </ul> </li> </ul>				
Notes	Project idea from Carbon Trust Report presented in March 2008				





# Appendix B12 Carbon Management Programme: Project Definition

Project: Reference:	VWHDC 12 - Lighting Efficiency Project – Abbey House				
Owner (person)	Len Rodway				
Department	Property and Estates				
Description	Phased replacement of T12 fluorescent lighting with T5 Units and where possible T8 with T5 units				
Benefits	<ul> <li>Financial savings: £ 2,800</li> <li>Payback period: 3.7 years</li> <li>CO<sub>2</sub> Emissions reduction: 20.6 tonnes of CO<sub>2</sub></li> <li>kWh saved 48,000</li> </ul>				
Funding	<ul> <li>Estimated £10,500 financing from existing budgets over 3 years.</li> <li>Funding decision to be made by Property and Estates Team</li> </ul>				
Resources	No additional resources required.				
Ensuring Success	<ul> <li>Key success factors         <ul> <li>All old lighting replaced with T5 units where possible</li> </ul> </li> <li>Principal risks:         <ul> <li>Full energy savings are not realised due to Voltage Optimisation.</li> <li>May have to replace all 635 ceiling units rather than just the bulbs with adaptors. This would quadruple the cost.</li> </ul> </li> </ul>				
Measuring Success	<ul> <li>Metrics for displaying performance or achievement         <ul> <li>Continuous monitoring of number of lights upgraded</li> <li>Monthly comparisons</li> </ul> </li> </ul>				
Timing	<ul> <li>Milestones / key dates e.g.</li> <li>Roll out due to be complete by 2012</li> </ul>				
Notes	Information from Carbon Trust survey carried out in March 2008. Currently a small fraction of lights have been converted to T5 and the costs per unit are between £60 and £70. Applied to all 635 units this equates to a cost of £40,000				





#### Appendix B13 Carbon Management Programme: Project Definition

Project:	VWHDC 13 – Timers on all MFDs				
Reference:					
Owner (person)	Ian Thompson				
Department	ICT				
Description	Currently only a small number of printers and multi functional devices have timer switches on them. This enables them to be switched off at night and at weekends. Most printers and MFDs are not switched of as nobody has ownership of them as is the case with a PC. This project would fit timers on up to 30 printers and MFDs in 2009 – and also role out to vending machines in Council facilities.				
Benefits	• Financial savings: £ 1,360				
	Payback period: 0.22 years				
	<ul> <li>CO<sub>2</sub> Emissions reduction: 11 tonnes of CO<sub>2</sub></li> </ul>				
	See notes section for more information				
Funding	£300 to fund the cost of the timer switched				
Resources	• This project will be delivered within current resources				
Ensuring Success	<ul> <li>Key success factors         <ul> <li>Continued involvement of ICT in deploying timers</li> </ul> </li> <li>Principal risks:         <ul> <li>Some equipment is not compatible with timer switches</li> <li>Major office move in 2009 may result in some MFDs being disconnected from timers</li> </ul> </li> </ul>				
Measuring Success	<ul> <li>Metrics for displaying performance or achievement         <ul> <li>Timer installation data available from ICT.</li> </ul> </li> <li>When success will be measured / evaluated         <ul> <li>Periodic checks to ensure timers are working</li> </ul> </li> </ul>				
Timing	<ul> <li>Milestones / key dates e.g.</li> <li>decision points – decision already made and first batch of timers already purchased</li> <li>start of implementation – now and ongoing through 2009</li> <li>when it will deliver savings – 2009.</li> </ul>				
Notes	Estimated savings are based on only 20 MFDs being connected to timers through a combination of technical or organisational reasons as mentioned under 'principal risks'				





## Appendix B14 Carbon Management Programme: Project Definition

Project: Reference:	VWHDC 14 - Motorised Pool Covers				
Owner (person)	Chris Webb – Leisure Facilities Manager				
Department	Leisure Facilities				
Description	Solid motorised pool covers for all of the indoor pools at the Faringdon, Wantage and White Horse Tennis and Leisure Centre				
Benefits	Financial £ CO2 Savings Payback				
	Faringdon	1,386	8.5	5.93	
	Wantage	2,710	13.4	5.47	
	White Horse	£4,331	27	5.91	
	Total	£8,427	48.9		
Funding	• Source of fund funding is inve	estment criteria ca	ange Capital funding		
Resources	<ul> <li>Unclear as to whether leisure centre operators would be able to absorb additional labour (estimated to be 1/2 to 1 person hour per day to deploy and retrieve covers). This would amount to £2,548</li> <li>Annual maintenance costs of up to £500 per cover per year</li> </ul>				
Ensuring Success	<ul> <li>Key success factors,         <ul> <li>Reduction in heat and evaporation from pools which in turn means less ventilation required</li> </ul> </li> <li>Principal risks:         <ul> <li>Pool covers not deployed – ensure staff are rostered to deploy covers</li> <li>VSDs installation not synchronised with pool covers</li> <li>Unknown technical problems result on covers of VSDs not being installed.</li> <li>Desire to implement other projects makes pools covers relatively more expensive – investigate liquid pool covers.</li> </ul> </li> </ul>				
Measuring Success	<ul> <li>Metrics for displaying performance or achievement         <ul> <li>Monthly gas usage</li> </ul> </li> <li>When success will be measured / evaluated         <ul> <li>Monthly</li> </ul> </li> </ul>				
Timing	<ul> <li>Milestones / key dates e.g.</li> <li>decision points – Funding decision Feb 09</li> <li>start of implementation – Mid / end 09</li> <li>when it will deliver savings - 2010</li> </ul>				
Notes	Information based on a quotation from Forge Pool Covers made in 2007, 5% has been added to the quote to cover price increases.				





# Appendix B15 Carbon Management Programme: Project Definition

Project:	VWHDC 15 – Variable Speed Drives at all Leisure Centres				
Reference:					
Owner (person)	Chris Web				
Department	Leisure Facilities				
Description	Variable Speed Drives to replace single speed drives on pool pumps and air handling units at 3 Leisure Centres				
Benefits	<ul> <li>Financial savings: £ 17,500</li> <li>Payback period: 1.1 years</li> <li>CO<sub>2</sub> Emissions reduction: 138 tonnes of CO<sub>2</sub></li> <li>kWh savings 250,000</li> </ul>				
Funding	<ul> <li>Capital funding of £20,455 required</li> <li>Source of funding: internal; Council's Capital programme and possibly Salix bid if Salix funding criteria are met.</li> <li>Decision on funding will be made in March 2009</li> </ul>				
Resources	This project will be delivered within current staff resources				
Ensuring Success	<ul> <li>Key success factors         <ul> <li>Pool covers installed and operational</li> <li>VSDs properly linked to humidistat control</li> </ul> </li> <li>Principal risks         <ul> <li>Pool covers not installed – Install liquid covers as temporary measure</li> <li>Insufficient funds to pay for VSDs – Install biggest drives first and others when funds are available</li> <li>Centre operators don't agree to installation – Wait and renegotiate contracts at appropriate point</li> </ul> </li> </ul>				
Measuring Success	<ul> <li>Metrics for displaying performance or achievement         <ul> <li>Monthly monitoring and display of data in main foyer</li> </ul> </li> <li>When success will be measured / evaluated         <ul> <li>Annual Carbon Report</li> </ul> </li> </ul>				
Timing	<ul> <li>Milestones / key dates e.g.</li> <li>decision points – funding decision March 2009</li> <li>start of implementation – Mid 2009</li> <li>when it will deliver savings - Immediately</li> </ul>				
Notes	Information based on quote for VSDs at White Horse Tennis and Leisure Centre and then applied to other centres using quantification briefing note from ESD and Energy Consumption Guide 78				





# Appendix B16 Carbon Management Programme: Project Definition.

Project: Reference:	VWHDC 16 - Voltage Optimisation – Wantage Civic Hall					
Owner (person)	Richard Embling					
Department	Property and Facilities Management					
Description	Installation of voltage optimisation equipment in Wantage Civic Hall					
Benefits	<ul> <li>Financial savings: £ 1,754 per annum</li> <li>Payback period: 4.5 years</li> <li>CO<sub>2</sub> Emissions reduction: 9.171 tonnes of CO<sub>2</sub></li> </ul>					
Funding	<ul> <li>£7,762 capital expenditure including installation of £1,800</li> <li>Source of funding: Capital Budget + Salix Finance if projects meets Salix funding criteria</li> <li>Funding decision made on Feb 2009</li> </ul>					
Resources	No additional resources required					
Ensuring Success	<ul> <li>Key success factors – Proper location and sizing of the unit</li> <li>Principal risks:         <ul> <li>Technical - Unable to site unit close to meter thereby raising installation costs and affecting ROI and £/tonneCO2</li> <li>Financial - Becomes ineligible for Salix raising costs to Council</li> </ul> </li> </ul>					
Measuring Success	<ul> <li>Metrics for displaying performance or achievement         <ul> <li>Monthly reporting to Leisure Facilities Manager</li> </ul> </li> <li>When success will be measured / evaluated         <ul> <li>Annual Carbon Report</li> </ul> </li> </ul>					
Timing	<ul> <li>Milestones / key dates e.g.</li> <li>decision points – Funding decision in March 2009</li> <li>start of implementation – Mid 2009</li> <li>when it will deliver savings - Immediately</li> </ul>					
Notes	It is possible that the Wantage Civic Hall will be sold or its ownership transferred to a Trust. The Council does not intend to retain any further involvement in the management of this facility after 2010/11. In which case this building would not be part of the Council's baseline and any measures installed would not count towards the Council's target					





## Appendix B17 Carbon Management Programme: Project Definition

Project: Reference:	VWHDC 17 - Replacement Boilers for Abbey House integrated with BMS upgrade and additional zone controls				
Owner (person)	Len Rodway –				
Department	Property and Estates				
Description	The five boilers in the main council offices are coming to the end of their expected lives. They will need to be replaced within the next 3 years. At this stage the project would be to replace them with high efficiency gas boilers, however the Council will also assess the feasibility of installing either a gas fired orf biomass CHP unit as an alternative. At the same time the Council will also upgrade its BMS systems and install additional heating control zones to increase the responsiveness of the system.				
Benefits		Finance savings	CO2 savings	Payback	
	Boilers	£3,600	22	Does not	
	BMS upgrade	£2,070	13	9.66	
	Additional zones	unknown	unknown		
	TOTAL	£5,670	35		
Funding		Capital Cost	Source	Decision	
	Boilers + BMS	80,000 +	Capital prog	Feb 10	
	TOTAL	80,000 +			
Resources	<ul> <li>Some additional resource requirement to carry out detailed feasibility of CHP and produce specification for new boilers or CHP unit(s). The funding for this would come from the Climate Change Revenue budget.</li> <li>Additional heating zones have not been included in the bid for capital funds. When more information is available this could be a viable project.</li> </ul>				
Ensuring Success	<ul> <li>Key success factors         <ul> <li>Agreement to replace boilers and funding made available</li> </ul> </li> <li>Principal risks: technical, financial         <ul> <li>Funding not made available</li> <li>Major failure before planned replacement results in Council not making most of opportunity</li> </ul> </li> </ul>				
Measuring Success	<ul> <li>Metrics for displaying performance or achievement         <ul> <li>Monthly gas usage chart next to DEC</li> </ul> </li> <li>When success will be measured / evaluated             <ul> <li>Costs and CO2 emissions reviewed after 1<sup>st</sup> year</li> </ul> </li> </ul>				
Timing	<ul> <li>Milestones / key dates e.g.</li> <li>decision points – Feb 10</li> <li>start of implementation - Summer 2011</li> <li>when it will deliver savings - Winter 2011</li> </ul>				
Notes	Should the Council opt for a gas or biomass CHP unit, the resultant emissions savings would be greater than that stated here. A biomass CHP unit save up to 73 tonnes of carbon per year				





#### Appendix B18 Carbon Management Programme: Project Definition

Project: Reference:	VWHDC 18 – Heating System improvements and control adjustments to Guildhall and Wantage Civic Hall
Owner (person)	Len Rodway
Department	Property and Estates
Description	The heating system in the Guildhall has limited control and gas usage at Wantage Civic Hall is above the benchmark standard indicating some adjustment/improvement to controls maybe necessary.
Benefits	<ul> <li>Financial savings: £ 1,800 per annum</li> <li>Payback period: 1.1 years</li> <li>CO<sub>2</sub> Emissions reduction: 11 tonnes of CO<sub>2</sub></li> </ul>
Funding	£2000 capital funding to pay for improved controls, thermostats etc
Resources	This project will be delivered within existing resources.
Ensuring Success	<ul> <li>Key success factors         <ul> <li>Adjusted settings are adhered to.</li> </ul> </li> <li>Principal risks: technical, financial         <ul> <li>Buildings maybe sold before benefits can be reaped.</li> <li>Unable to retrofit minor improvement to the existing system.</li> </ul> </li> </ul>
Measuring Success	<ul> <li>Metrics for displaying performance or achievement         <ul> <li>Monthly gas usage chart in reception area next to DEC.</li> <li>Building temperatures</li> </ul> </li> <li>When success will be measured / evaluated         <ul> <li>2009 Heating season</li> </ul> </li> </ul>
Timing	<ul> <li>Milestones / key dates e.g.</li> <li>decision points – Feb 09</li> <li>start of implementation - 2009</li> <li>when it will deliver savings - 2009</li> </ul>
Notes	Based upon information provided via Carbon Trust survey in 2008