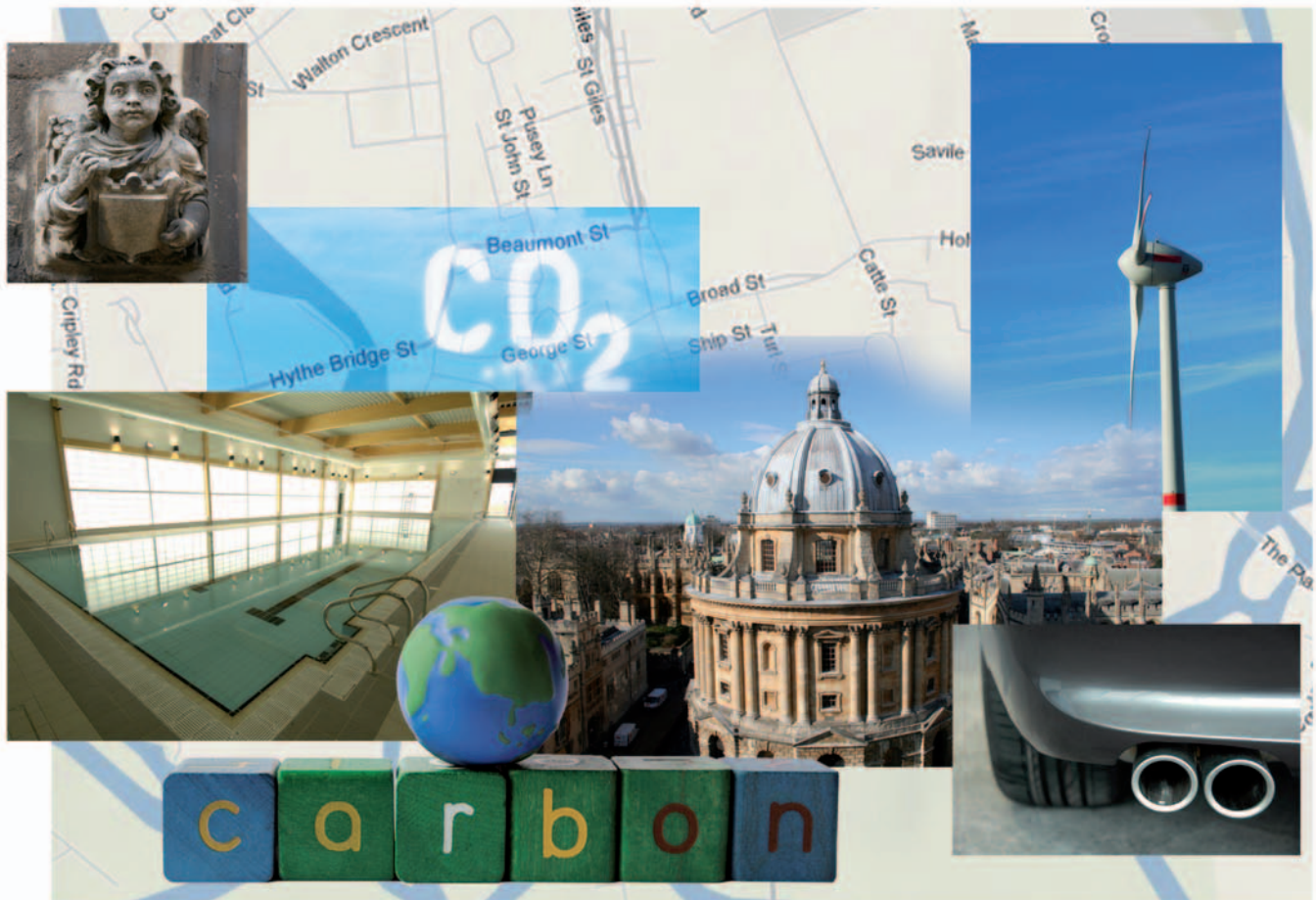


# Oxford City Council Carbon Management Programme



## Getting Our House in Order

The Carbon Management Strategy and Implementation Plan (SIP)



## 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.

Oxford City Council was selected in 2007, amidst strong competition, to take part in this ambitious programme. Oxford City Council partnered with the Carbon Trust on this programme in order to realise vast carbon and cost savings. This Carbon Strategy and Reduction Plan commits the council to a target of reducing CO<sub>2</sub> by 25% by 2010/11 (against the 2005/6 baseline year) and 3% year on year CO<sub>2</sub> savings and underpins potential financial savings to the council of around £1.24 million.

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

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

**Richard Rugg**

Head of Public Sector, Carbon Trust

## Foreword from the Chief Executive of Oxford City Council

We welcome the launch of the Oxford City Council Carbon Management Strategy and Implementation Plan. We have committed in the Council's corporate plan to reduce our carbon dioxide emissions from our own buildings and operations by at least 25% compared to 2005/6 by March 2011 (and 3% year on year thereafter).

We will work to ensure that this objective is realised and that high standards of environmental management are adopted throughout the organisation. As well as "getting our house in order", we will continue to provide wider leadership to local businesses, communities and households in reducing the overall carbon footprint of Oxford City.

Signed



Peter Sloman, Chief Executive

Date: 24/04/08

## Summary

### 1 Background

Local Authorities are in a key position to lead on approaches to tackle climate change such as mitigation actions in reducing carbon emissions from their buildings and operations and adaptation actions in future proofing services, buildings and operations from extreme weather events.

Oxford City Council was selected in 2007, amidst strong competition, to take part in the prestigious Carbon Trust Local Authority Carbon Management Programme. In May 2007, we embarked on a 10-month programme of consultancy and support with the Carbon Trust following a 5-step tried and tested process to develop a long-term carbon management approach to manage carbon dioxide emissions across the Council's buildings and operations (see diagram below). The product of this process is the Oxford City Council Carbon Management Strategy and Implementation Plan (OCC SIP) outlined here which has the overarching aim of mapping a path to a lower carbon council over the next 5 years and beyond.

Prior to commencing the Carbon Management Programme, Oxford City Council had already set the challenging target of reducing carbon emissions by 25% by 2010/11 [and 3% year on year beyond 2010/11] via the Climate Change Action Plan. This Strategy and Implementation plan outlines how we can meet and potentially exceed this target with long-term political and officer commitment to the Carbon Management Programme.



### 2 Carbon management drivers

***Stern Review 2006:  
“the cost of inaction  
on climate change  
will be far higher  
than the cost of  
tackling climate  
change now.”***

In October 2006, the Stern Review of the economics of climate change concluded that the cost of inaction on climate change would be far higher than the cost of tackling climate change now. The Government is therefore committed to mitigating climate change in order to protect long-term economic stability and has committed to reduce carbon dioxide emissions by 20% by 2010.

The draft Climate Change Bill published in March 07 (and aiming for Royal Assent later in 2008) aims to set a statutory

target of at least 60% by 2050 for the UK. In all climate and energy policy documents published by the Government, energy efficiency and increased use of renewable energy are seen as central to achieving carbon reduction emissions aims.

The UK Climate Change Programme 2006 identifies local authorities as critical to the achievement of the Government's climate change objectives. They are seen as being a key facilitator in making significant carbon dioxide reductions across the UK and are uniquely placed to act on climate change in terms of reducing emissions in its own buildings and operations and in motivating the wider community to action, based on their understanding of local priorities and drivers. This role is further emphasised in the 2006 Local Government White Paper proposing significant strengthening of local government's leadership role in tackling climate change reflected in the new Comprehensive Area Assessments and Local Area Agreements (LAA2 targets etc).

### 3 The Vision

As well as the compelling global consensus and supporting evidence that we need to act now to tackle climate change, rising energy prices and diminishing conventional energy resources also mean it is imperative that we improve energy efficiency and reduce our reliance on fossil-derived energy across Oxford City Council.

#### The Vision:

**We, at Oxford City Council, want to demonstrate leadership in the area of climate change action, and "get our house in order" by reducing our own direct and indirect carbon dioxide emissions as efficiently and effectively as possible.**

Oxford citizens expect sound environment and resource management by the Council and the Carbon Management Strategy and Implementation Plan will help us to make our vision a reality and lead by example to the private sector and communities that we serve.

The vision will be realised through:

- adopting carbon management as a key corporate priority engraining carbon management best practice across all operations.
- using the £400k Salix/Carbon Reduction Investment budget funds secured in Jan 2008 to implement a range of energy efficiency/low carbon technologies across the council over the coming years. (The Salix fund is made up of £200k from



OCC and £200K from Salix for a ring-fenced recycled fund. The total fund of £400K is owned and managed by OCC and topped up each year from budget neutral loan repayments made back into the scheme from energy savings made.)

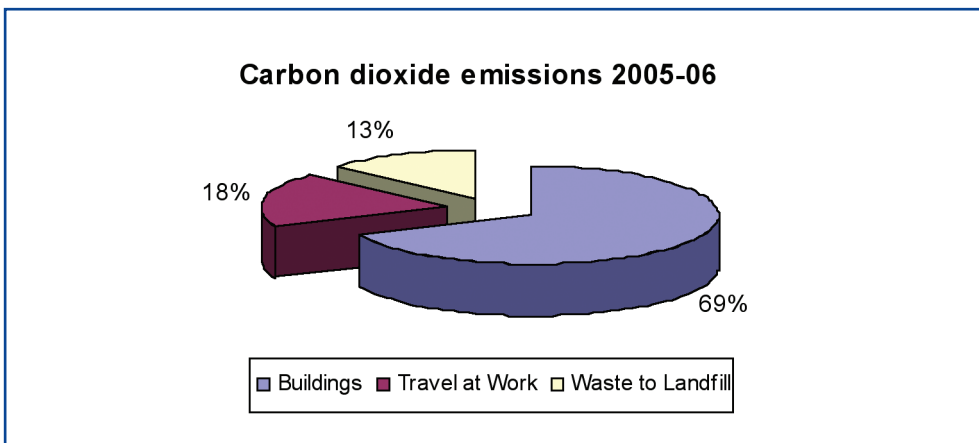
- allocating central budget funds beyond those already secured for Salix finance for carbon management activities that push the boundaries of achievement and help create an exemplar low carbon council.
- introducing policies and standards to reduce carbon dioxide emissions within key areas such as buildings, fleet, waste disposal, procurement and business travel.
- generating or encouraging development of decentralised energy infrastructure (including community-scale and onsite renewables) that will reduce our reliance on traditional energy sources.

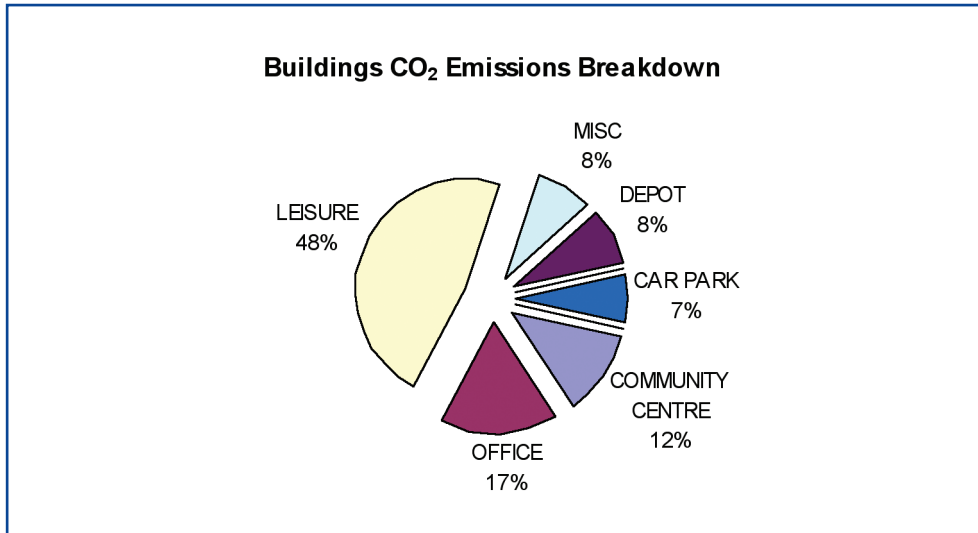
#### 4 Emissions baseline

**9800tonnes of CO<sub>2</sub> could fill over 350million party balloons!**

Carbon emissions (expressed as tonnes of carbon dioxide, CO<sub>2</sub>) from Council buildings and operations in 2005/6 have been estimated to be 9829 tonnes. The following table and charts presents a breakdown of the sector emissions and associated costs. Within Buildings – leisure accounts for almost 50% of building emissions. It has been estimated that 9800tonnes of CO<sub>2</sub> could fill over 350million party balloons!

Emissions source	Emissions (tonnes CO <sub>2</sub> )	Associated Costs (£000s)
Energy use in buildings	6731	1167
Travel at Work - Fleet (refuse trucks, etc) - Grey Fleet (private vehicles)	1783	701
Council generated waste to landfill	1315	tbc
<b>TOTAL</b>	<b>9829</b>	<b>1868</b>





Putting our existing CO<sub>2</sub> emissions baseline (ca 9,829tCO<sub>2</sub> on 2005/6 figures) into context, approximate emissions estimates for council housing stock (based on average SAP ratings on around 8,000 units – not relating to 2005/6 baseline year) total around 30,000tCO<sub>2</sub>. Emissions associated with municipal waste collected and sent to landfill come to around 17,000 tonnes CO<sub>2</sub>. Overall emissions associated with these key areas for Oxford City Council therefore total around 57,000 tCO<sub>2</sub>.

Putting this in to a wider context for Oxford City as a whole (covering OCC's administrative boundary), total CO<sub>2</sub> emissions for domestic, commercial and industrial sectors – based on Defra top down national statistics for 2005 - total around 1 million tonnes CO<sub>2</sub>.

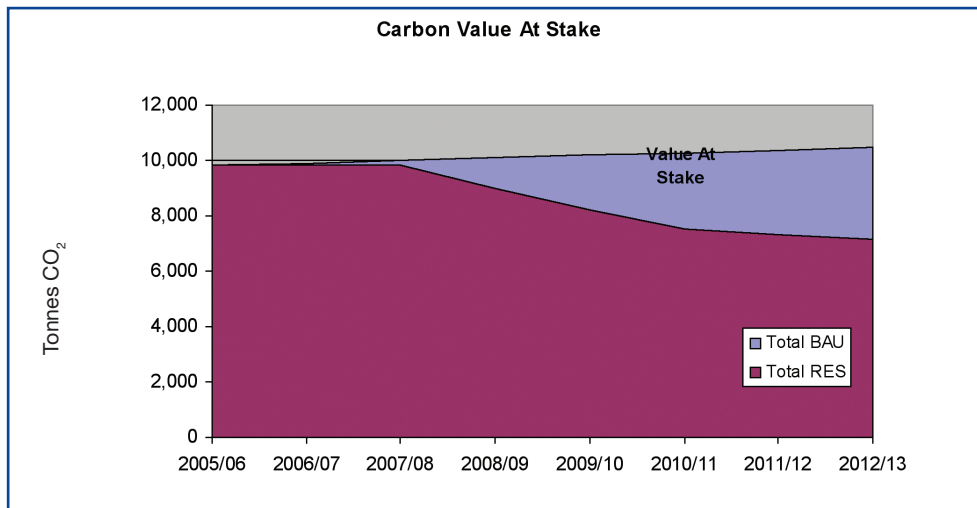
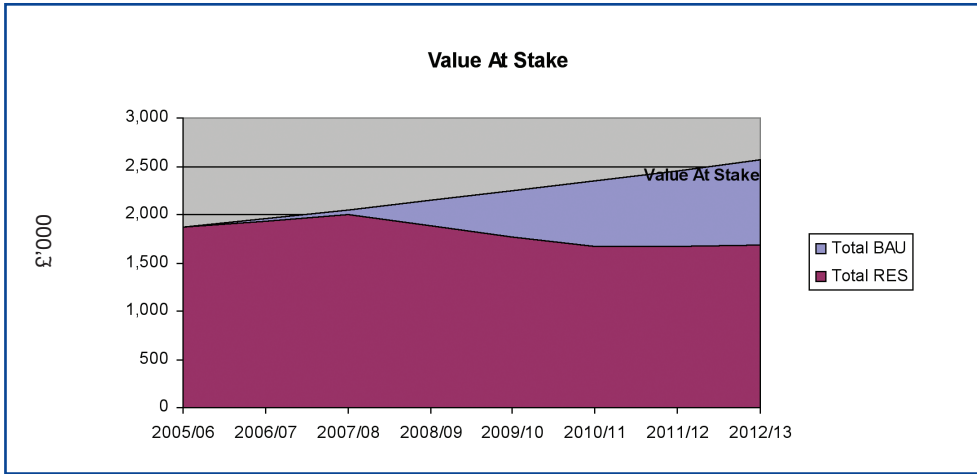
## 5 Value at Stake

To give an indication of the potential financial and carbon savings possible from implementation of a robust Carbon Management programme at OCC it is useful to calculate the overall "Value at Stake (VAS)" involved. The VAS is the aggregated difference between the predicted energy spend for the council under a Business as Usual scenario (i.e no significant carbon management approaches) and the energy spend in the Reduced Emissions Scenario (i.e implementation of a carbon management programme). BAU scenario figures are based on a number of central government derived assumptions such as projections of energy price rises, climate change levy impacts etc.

The VAS does not take into account costs required to implement carbon management initiatives but overall these would be expected to payback within 5 years of installation/implementation. The Carbon Value at stake is also calculated which is the equivalent calculation in tonnes of CO<sub>2</sub> in line with our carbon reduction targets.

***Value at Stake:  
£3.43m by the  
financial year  
2012/13 assuming  
we meet our carbon  
reduction targets  
with the VAS in that  
year of £893 000 per  
year***

The total VAS for Oxford City Council by the financial year 2012/13 is £3.43m assuming we meet our carbon reduction targets with the VAS in that year of £893 000 per year. (see charts below for further information)



By adopting this Strategy and Implementation Plan, Oxford City Council has the opportunity to limit its energy costs and reduce its CO<sub>2</sub> emissions. Failure to take action will result in an increase in energy costs and carbon emissions at least as much as those as detailed in the above charts.

## 6 Summary of costs and carbon savings

The table below shows estimated annual monetary and carbon savings for each year of implementation of the carbon management strategy and implementation plan. Additional projects may arise and contribute to carbon savings as the carbon management programme evolves and becomes engrained in OCC practice. Savings are shown over a five-year period to 2012/13, the carbon management plan will extend year on year beyond this point.

Total Estimated Capital Expenditure						£866,000
Estimated Annual Cost Savings						
	2008/09 savings	2009/10 savings	2010/11 savings	2011/12 savings	2012/13 savings	Total Savings
Annual savings (£)	177,713	225,233	270,419	274,879	287,005	£1,235,249
Estimated Annual Carbon Reductions						
	2008/09 savings	2009/10 savings	2010/11 savings	2011/12 savings	2012/13 savings	
Tonnes CO <sub>2</sub>	1,653	2,859	3,140	3,346	3,427	14,426

## 7 Financing the implementation plan

We anticipate a capital investment requirement of £866,000 that could save 3427tonnes of carbon dioxide and £287,005 savings per annum by 2012/13. The full strategy document sets out 20 carbon reduction initiatives that will be implemented over the next 5 years (with more potentially emerging as the Programme develops) and ensure that we realise the full carbon emissions reduction potential possible at OCC.

At the time of writing we have secured a £400,000 carbon reduction investment fund (Salix), however at least £430,000 in funding and sustained and committed human resources are required to realise the full carbon savings potential possible. It is estimated that the Salix revolving loan fund will meet around £600k of capital expenditure over the 5 year implementation period covering the bulk of the buildings related projects – leaving an estimated £431K shortfall on capital expenditure and operating costs from 09/10 to 2012/13 (ca £108K required per year over this period to cover this shortfall).

This shortfall is mostly for non-building related, softer projects, such as implementing sustained staff awareness campaigns, evolving the sustainable travel plan, fleet emission reduction projects and internal recycling schemes, on the one hand. On the other, it will enable more ambitious schemes to progress, which would not be achievable via Salix (e.g onsite renewable and very low carbon energy installations, larger more infrastructural energy efficiency projects). For the latter, external, possibly matched funding would be sought.



### **8 Implementing the Programme**

This Strategy and Implementation Plan will be owned by the Carbon Management Team (CMT). The annual actions detailed in the SIP (and as the Carbon Management Programme evolves) will be agreed by the CMT and approved annually by the Executive Board (EB).

The programme of work will be led by John Copley, Head of Environmental Development (and the Leader of Council/Chief Executive) supported by Paul Spencer, Climate Change Officer (Carbon Programme Manager) on a day-to-day basis.

A detailed governance, ownership and management structure is detailed in Section 8 of the full strategy document.

### **9 Monitoring and reporting**

Monitoring reports on progress with the overall carbon management programme as well as progress on individual projects as outlined in the Individual Actions section of the full strategy document (Appendix A) will be required on differing timescales and at different levels.

The following provides a high-level overview of reporting processes:

Executive Board – Interim report to EB in November each year with an update on progress with the Carbon Management Strategy and Implementation plan to factor in to following year's budgeting process. This short high-level summary report will cover projects underway, technologies installed, expected and actual energy/financial savings, problems/roadblocks to progress etc.

The Carbon Management Strategy and Implementation Plan will be reviewed and updated annually by the Carbon Management Team and Carbon

Management Board to assess progress on targets and status of implementation. An annual report will be presented to the Executive Board in June each year.

Progress on individual projects (as listed in the Individual Actions of the full strategy document: Appendix A) will be reported to the Carbon Programme Team every two months at Carbon Management Team meetings by individual Project owners.



This is a summary of ***Getting our House in Order*** (The Oxford City Council Carbon Management Strategy and Implementation Plan)". A full version of the Plan is available from the Sustainable Energy Team and on the webpages listed below.



[www.oxford.gov.uk](http://www.oxford.gov.uk)



For more information contact: Sustainable Energy Team

Tel: 01865 252197

[www.oxford.gov.uk/environment/city-climate.cfm](http://www.oxford.gov.uk/environment/city-climate.cfm)

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