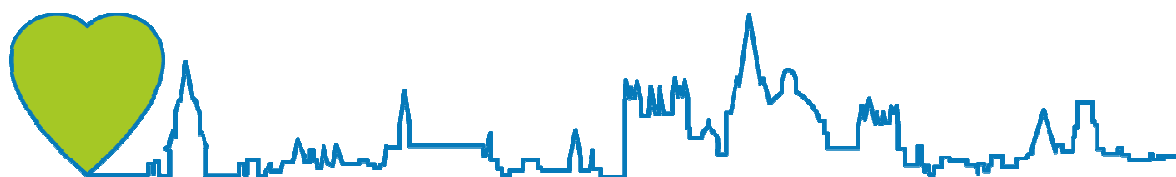


# Carbon Reduction at the Heart of everything we do



Oxford City Council Carbon Management Plan:  
2012-2017

*Towards a 5% year on year reduction in carbon dioxide  
(CO<sub>2</sub>) emissions*

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August 2012*

## *Carbon Reduction at the Heart of everything we do*

### Oxford City Council Carbon Management Plan: 2012-2017

#### **1. Introduction**

Oxford City Council adopted its first Carbon Management Strategy and Implementation Plan (Getting our House in Order) in 2008/09 which mapped out a path to a lower carbon council over 5 years and beyond. This was an ambitious Plan and the first key milestone was achieved in March 2011 with the Council implementing measures to reduce carbon dioxide (CO<sub>2</sub>) emissions by 25% (ca2,500tCO<sub>2</sub>) against the original 2005/6 baseline (ca10,000tCO<sub>2</sub>).

In the first three years of the carbon management programme, the Council has achieved acclaim for its successes and achievements to date in the area of carbon management. This has led to a series of knock-on benefits attracting significant funds into the City and boosting activities in the City-wide approach to CO<sub>2</sub> emissions reduction. Since 2008 the Council has accrued the following significant achievements in the field:

- won significant match funding to create an internal revolving Salix fund of £405k to implement low carbon technologies across the Council
- won two major national awards (Energy Saving Trust Green Fleet heroes and Carbon Trust Innovation Award – 2009/10)
- first local authority to achieve the Energy Reduction Verification kitemark in 2011
- “*Highly Commended*” in the Low Carbon Council category of the Local Government Chronicle awards 2011/12)
- one of 9 leading LA areas in the UK invited to take part in the DECC sponsored Low Carbon Frameworks project (leading to winning nearly £360k of additional funding which has helped kick-start Oxford low carbon communities projects and Low Carbon Oxford initiative)
- launched and developed the innovative Low Carbon Oxford initiative – bringing together key “pathfinder” organisations in the City to reduce the Carbon footprint of Oxford
- Green Apple award winner 2008/9 for Oxford is My World
- short-listed for Guardian Public Sector Sustainability Awards 2010/11

As part of the original carbon management plan, a 3% year on year CO<sub>2</sub> reduction target applied from 2011/12 onwards. However, the Council has now decided to increase its ambition mindful of the progress made with its carbon reduction activities, and its leadership role in this area. The 3% per year target will be lifted to 5% per year. This will set the local standard for carbon reduction and act as a spur to the Low Carbon Oxford initiative, where pathfinders have currently committed to a 3% year on year reduction.

A £300k revolving loan fund from 2013/14, operating in a similar way to the Salix fund, will assist with resourcing the additional stretch on the annual target. This fund will have a wider brief than Salix to enable carbon reduction through longer term and non-building related investments. It will maintain the principle applied using the Salix fund of including project management costs in the total of the loan to enable delivery of measures.

As the more obvious and accessible carbon reduction measures have already been implemented, it is now time to update the Carbon Management Plan to take account of the enhanced year on year reduction targets and changes in the scope of activities included. The revised plan will outline the route to achieving the new goals and reflect the change of scope.

This revised Carbon Management Plan (“***Carbon Reduction at the Heart of everything we do***”) outlines our programme of activity for carbon management over the next 5 years building

on the strong platform of achievement to date. It sets out the strategic context and the 'case for action', our revised carbon emissions scope and baseline, proposed projects and areas of activity and actions to reduce our emissions, as well as the governance arrangements (and escalation routes) to keep the programme on track.

There is compelling global consensus and supporting evidence that we need to act now to reduce the impact we are having on the rate of global warming. Rising energy prices, budget constraints, 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 for 2012 to 2017:**

Oxford City Council will place  
“**Carbon Reduction at the Heart of everything we do**” and continue to reduce carbon emissions in our estate and operations as efficiently and effectively as possible.

We will continue to provide wider leadership to local businesses, communities and households in reducing the overall carbon footprint of the City through our Low Carbon Oxford initiatives

## **2. Drivers/Links to key programmes at Council (external and internal)**

### **External drivers**

#### **Low Carbon Oxford**

In 2010, the City Council launched the Low Carbon Oxford (LCO) Charter on behalf of the Oxford Strategic Partnership, bringing together organisations from across the City to tackle climate change and its impacts. This pioneering approach brings together private and public sector bodies, the universities and community groups as Pathfinders in a collaborative approach to creating a sustainable, low carbon economy in our city.

Each organisation has committed to a 3% year on year reduction in CO<sub>2</sub> emissions. Signatories include Oxford City Council, University of Oxford, Oxford Brookes University, Oxfordshire County Council, Mini Plant Oxford, Unipart, Stagecoach, Marks & Spencer, B&Q, Buildbase, Serco, a2dominion, 2degrees, Blake Laphorn and community groups such as Low Carbon West Oxford. The LCO initiative continues to grow with recent recruits in 2012 being: Thames Valley Police, Grosvenor Estates, Oxford Student Hubs and the Hub Commercial Venture (parent company of the Turl Street Kitchens).

One of the projects within the LCO initiative is an Energy Efficiency Forum where sustainability and energy management professionals from participating Pathfinder organisations meet up and share ideas and experience to improve knowledge and understanding of low carbon technologies and approaches. This forum provides input as a “critical friend” to all Pathfinders and is working on specific projects to advance energy management approaches and review available technologies. The Energy Efficiency Forum

will assist in driving forward the Council's progress and meeting year on year carbon reduction targets.

#### **National/international legislation**

Continuing progress in the area of energy and carbon reduction is key to meeting requirements such as those emerging from international and national legislative backdrops e.g. Climate Change Act 2008 and the Carbon Reduction Commitment\_Energy Efficiency Scheme (CRC\_EES), and the Government Greenhouse Gas Reporting requirements. Reducing year on year CO<sub>2</sub> emissions will reduce the number of carbon allowances that the Council is required to purchase under the Carbon Reduction Commitment\_Energy Efficiency Scheme (CRC\_EES). The cost per tonne of CO<sub>2</sub> emitted during 2011/12 was £12 leading to a CRC\_EES allowance payment of £61,344 during the reporting year 2011/12. The cost per tonne of CO<sub>2</sub> is set to rise in future reporting years.

#### **Internal drivers**

##### **Corporate Plan**

One of the Council's key overarching priorities which have been used as its guiding principles in constructing the current budget (2011-2015) places environmental sustainability and carbon reduction at the heart of everything that the Council does. This cuts across all of the Council's key priorities. <http://www.oxford.gov.uk/Direct/CorporatePlan201115.pdf>

As outlined above, Oxford City Council is adding a further stretch to its LCO commitments by raising its annual year on year target to a 5% reduction in CO<sub>2</sub> emissions, from 2012/13.

Council internal strategies and plans that will have key dependencies or should have close links with the carbon management plan include:

##### **Asset Management Plan**

Driven by Corporate Property, the Asset Management plan provides a statement of how the Council is managing its land and buildings, setting future direction and provides a framework for Corporate decision making on property. This will be important for planning and prioritising carbon reduction and management approaches in Council owned and operated buildings, providing clearer understanding of the priorities and identifying potential areas of cross-over with the Carbon Management Plan – eg development/regeneration projects such as the Depot Rationalisation Plan, Council housing development and leisure centre development substantive work programmes.

##### **Leisure/Fusion Management Plan**

A key section of this plan outlines targets for energy and carbon reduction within the leisure centres currently being managed by Fusion Lifestyle Ltd. Making up over 40% of the Council's buildings carbon footprint, continuing cooperation from Fusion in reducing energy consumption and carbon emissions in these buildings will be crucial to the Council keeping on track with its year on year targets. The revised Carbon Management plan will be a key source of reference for the ongoing City Council/Fusion energy and carbon management meetings (currently held every 6 weeks) to drive and review progress on implementation of Salix funded carbon reduction initiatives in leisure buildings.

##### **Green Fleet review/Staff workplace travel plan**

Continuing implementation of recommendations from the Energy Saving Trust green fleet review and development of the staff workplace travel plan will contribute to the aims of this Carbon Management Plan in tackling Carbon emissions associated with fleet use and staff business travel. It is timely to consolidate the staff workplace travel plan and roles and responsibilities for delivery. An updated plan should be developed in line with timings of the overall carbon management plan with an associated communications campaign to raise

awareness of areas within staff control for limiting carbon emissions from this part of the emissions scope.

### **Waste Management Strategy (including internal recycling)**

Development of the Council's latest Waste Management strategy should give due consideration to potential impacts on carbon emissions from municipal waste collection approaches. Any changes in rounds collections or waste disposal routes may have an impact on fleet fuel consumption (e.g. from refuse trucks and tippers) and hence affect Council carbon emissions.

There are very good carbon emissions reduction reasons for expanding the collection of waste/recycling to reduce the amount of the municipal waste stream going to landfill (as well as the usual economic and wider environmental reasons). Whilst overall carbon emissions may decrease for Oxford in such a scenario, the operational footprint of Oxford City Council could increase.

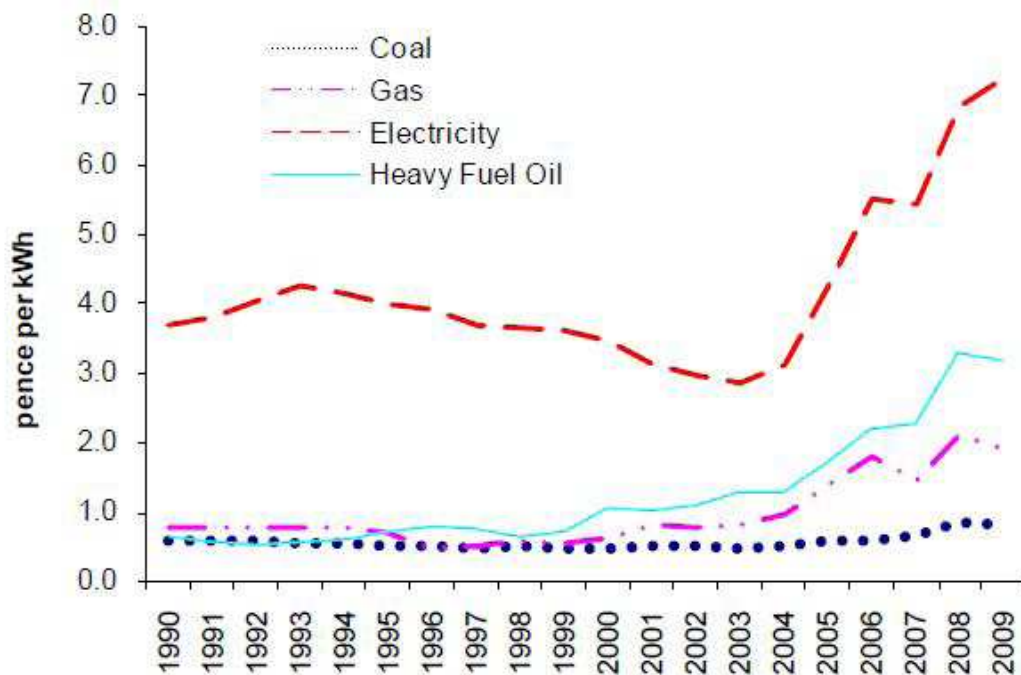
Consolidation and continuation of the council-wide internal recycling scheme (with review of roles/responsibilities for ongoing delivery) will ensure that the Council's own generated waste sent to landfill is limited (waste to landfill is one area of scope of the Council's CO<sub>2</sub> emissions, see Section 4 below).

### **Low Emissions Strategy: Oxford**

An Oxford City-focussed Low Emissions Strategy (LES) was commissioned in 2010 following the winning of Defra funding and has been reviewed where relevant in developing this updated Carbon Management Plan. The LES strategy is much broader in scope and coverage than the Carbon Management Plan and outlines approaches for improving air quality in the City of Oxford and reducing carbon emissions.

### **3. Case for action/risks**

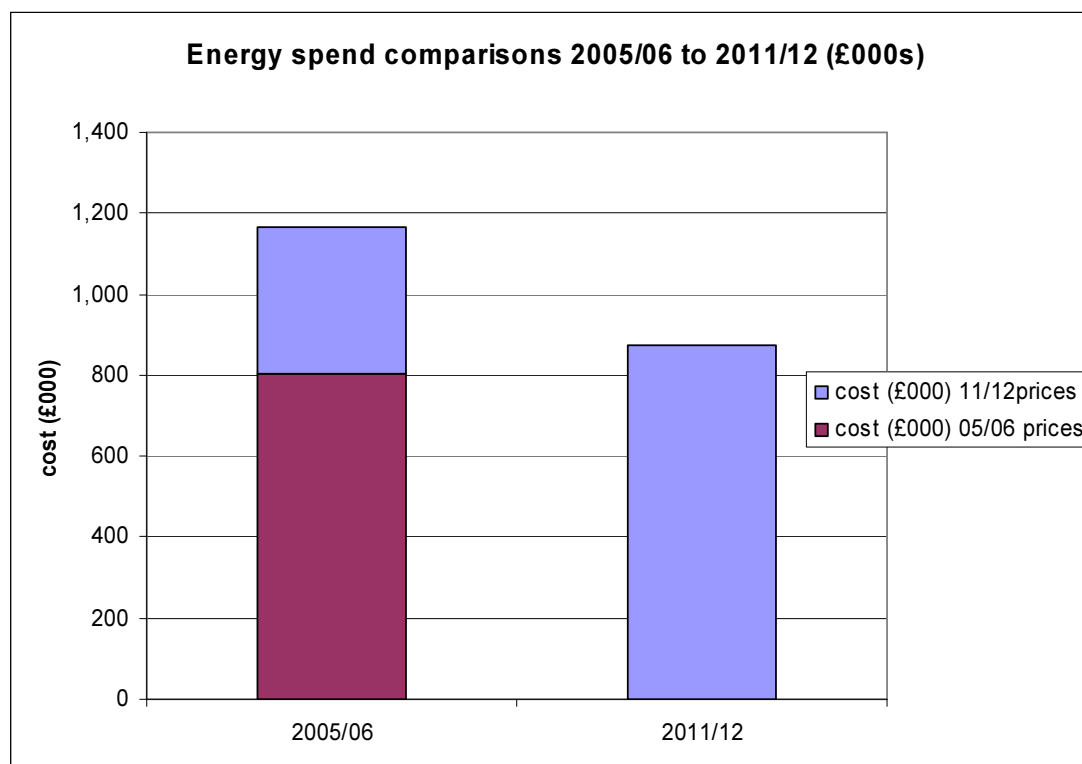
Increasing budgetary pressures and rising energy costs make the case for energy and carbon reduction action ever stronger with added benefits of delivering improved operational efficiencies within the Council and value for money. Building carbon reduction (and by implication energy reduction) capacity has the direct effect of reducing energy spend which is crucial in providing effective resource management and mitigating risk against future expected energy price rises.



The figure above shows Department of Energy and Climate Change (DECC) sourced data on energy prices from 1990 to 2009. Steep rises in gas and electricity prices have been experienced since 2004. Average price Increases in the period 2004- 09 are electricity - 133%, and gas 98%. This informal trend is expected to continue.

Carbon reduction measures are also a good risk management approach in mitigating the impact of year on year energy price increases which will affect the Council increasingly in future.

Oxford City Council avoided annual energy costs for its core buildings are calculated to be circa £290,000 per annum in 2011/12 relative to 2005/06 since implementation of a carbon management programme of activities and installations i.e. if the Council was consuming energy at the same levels as it was in 2005/06 in its core buildings, the energy spend would be ca £290,000 higher than it is today. The bar chart below illustrates this with energy spend in core buildings in 2005/06 shown compared to 2011/12 at today's prices (blue bars). Energy spend at prices current to the 2005/06 period are also detailed (red bar) to highlight the impact of energy price increases in recent years.



Reducing the risk of penalties and charges arising from the Carbon Reduction Commitment Energy Efficiency Scheme are also key benefits of establishing a robust carbon management plan and implementation plan and achieving year on year carbon reduction targets.

Providing wider leadership in the emerging area of carbon reduction assists in inspiring others to do the same and develop confidence in individuals and organisations to take action, supporting the overall aims of the Low Carbon Oxford initiative to reduce CO<sub>2</sub> emissions in Oxford City.

#### 4. Expanded CO<sub>2</sub> Emissions boundary/Scope

The original CO<sub>2</sub> emissions baseline data was based on the financial year 2005/6. The emissions boundary was limited to areas that demonstrated significant carbon emissions and where sufficient data was available at the time; were in the direct influence/control of the City Council and could realise financial benefits as a direct result of carbon reduction initiatives.

The following sources of emissions were addressed:

- All Council (operational) buildings (existing and new) – including swimming pools, sports facilities, car parks, pavilions, public conveniences etc
- Vehicles/Fleet
- Staff travel/Travel at Work (i.e. business travel/staff owned cars used to conduct council business [grey fleet] etc)
- Waste disposal to landfill (Council generated) – *(subject to adequate data availability)*

As outlined as an aspiration in the original carbon management plan, it is proposed that the above scope should be expanded to include emissions from:

- Communal areas of Oxford City Council Housing stock that are the billing responsibility of the Council (including Temporary Accommodations sites where viable) – ca. 1760tCO<sub>2</sub>/yr (2010/11, from invoiced consumption data)
- Other miscellaneous buildings/sites that now are the billing responsibility of the Council (eg new sites, misc. smaller sites not previously included in 2005/6 baseline)

The scope of the updated carbon management plan will cover all sites that are the Council's energy billing responsibility, sites that are significant emissions sources within the Council's operations and sites where we can use Salix funds to implement energy efficiency measures. It will bring in significantly more CO<sub>2</sub> emissions sources than in the original baseline from 2005/6 as data availability and quality has improved. The scope goes beyond the level of that currently required for mandatory local government carbon reporting such as via the Carbon Reduction Commitment\_Energy Efficiency Scheme and the Department of Energy and Climate Change (DECC) Annual Green House Gas reporting.

Emissions savings made from "Green" electricity purchasing will **not** be accounted for in the emissions baseline – unless the Renewable Obligation Certificates can be retired by the City Council - in accordance with advice from Carbon Trust consultants.



### The New Scope

The following table and charts give a breakdown of the main sources of CO<sub>2</sub> emissions at Oxford City Council for the revised and expanded scope (2010/11 data). (note: *Financial data is based on average unit costs, so indicative only. All categories have increased in scope and quantity of sites covered compared to 2005/6 baseline.*)

Category		tCO <sub>2</sub> 2010/11	%	Estimated Cost £k	%
<b>Buildings and other sites</b>	Offices	1,047	10%	183	7%
	Sports Pavilions	212	2%	38	1%
	Public Conveniences	115	1%	21	1%
	Leisure Centres	3,329	31%	582	23%
	Council Housing (Communal supplies)	1,761	16%	308	12%
	Car Parks	408	4%	75	2%
	Other buildings	480	4%	85	3%
	Depots	583	5%	102	4%
	<b>Transport</b>	Fleet ( <i>Council owned refuse trucks, vans, etc</i> )	2,121	19%	1,131
Grey fleet ( <i>eg staff vehicles used for council business, public transp</i> )		91	1%	50	2%
<b>Waste</b>	Operational Waste to Landfill	746	7%	2	0%
<b>Totals</b>		<b>10,894</b>	<b>100%</b>	<b>2,577</b>	<b>100%</b>

### Excluded from the New Scope

**Water consumption and CO<sub>2</sub> content** The carbon dioxide emissions content of water (e.g. from processing and transport) is small relative to emissions from electricity, gas and fuel consumption in our buildings and vehicles (ca <1% of total CO<sub>2</sub> emissions for the Council).

The Sustainability Strategy adopted by the City Council set a 3% water consumption reduction target from 2010/11 relative to a 2008/09 baseline. Total water consumption in that year was ca 176,000m<sup>3</sup> costing the council ca £250k in water and wastewater costs. CO<sub>2</sub> emissions associated with this water consumption are equivalent to ca 71tCO<sub>2</sub>/yr. It is proposed that the CO<sub>2</sub> content of water will not be included in the annual reporting for the Carbon management plan given the relatively small CO<sub>2</sub> content. However annual water consumption figures across the estate will be monitored and reported alongside the Carbon management reporting where data quality is good (e.g. large buildings and operations) and systems developed to improve water consumption data (e.g. water smart meters in large buildings where possible) and reduce water consumption.

**Procurement and CO<sub>2</sub>:** Estimates based on the assessment made by other local authorities suggest that our procurement of goods and services results in a material carbon emissions figure though this can be difficult to isolate for carbon reduction purposes.

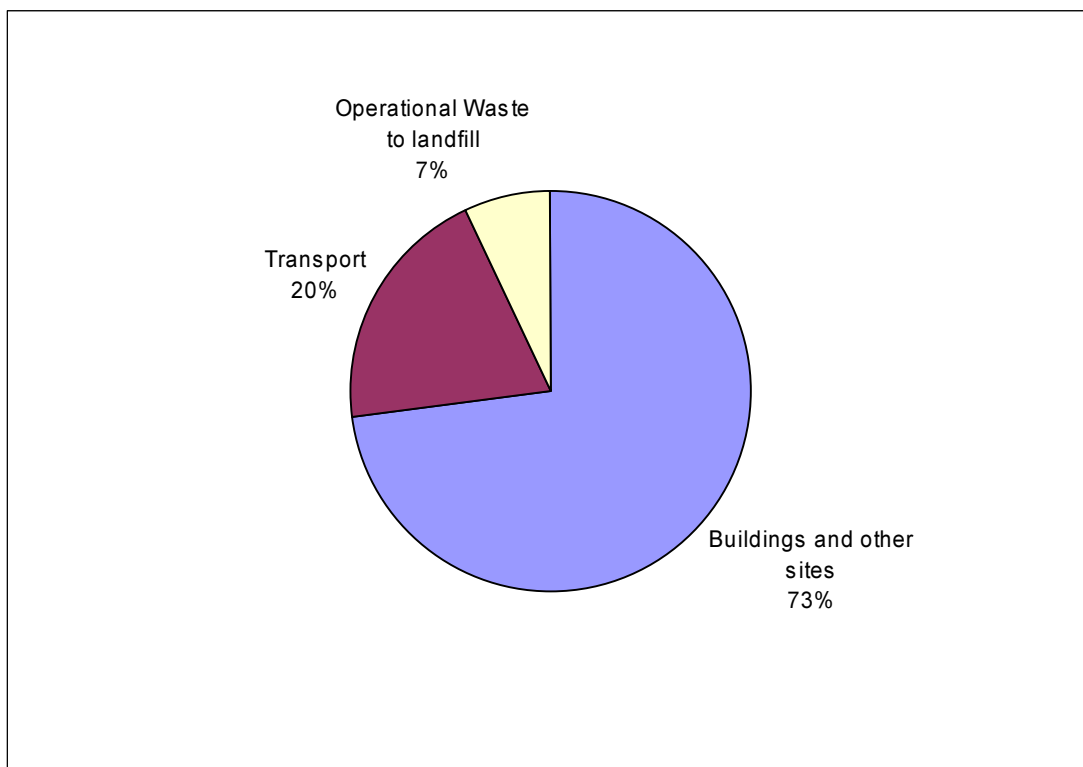


Figure 1: Breakdown of CO<sub>2</sub> emissions per main category 2010/11

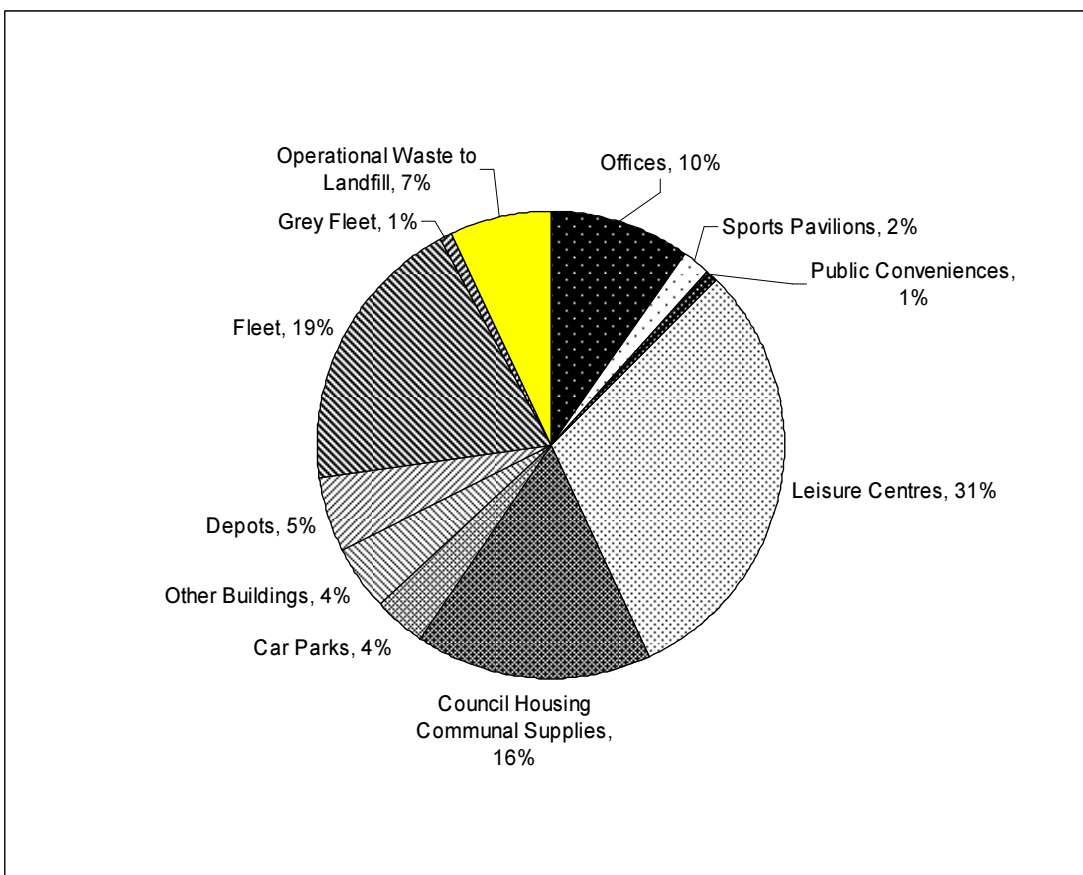


Figure 2: Breakdown of CO<sub>2</sub> emissions sources by category (further detail) 2010/11

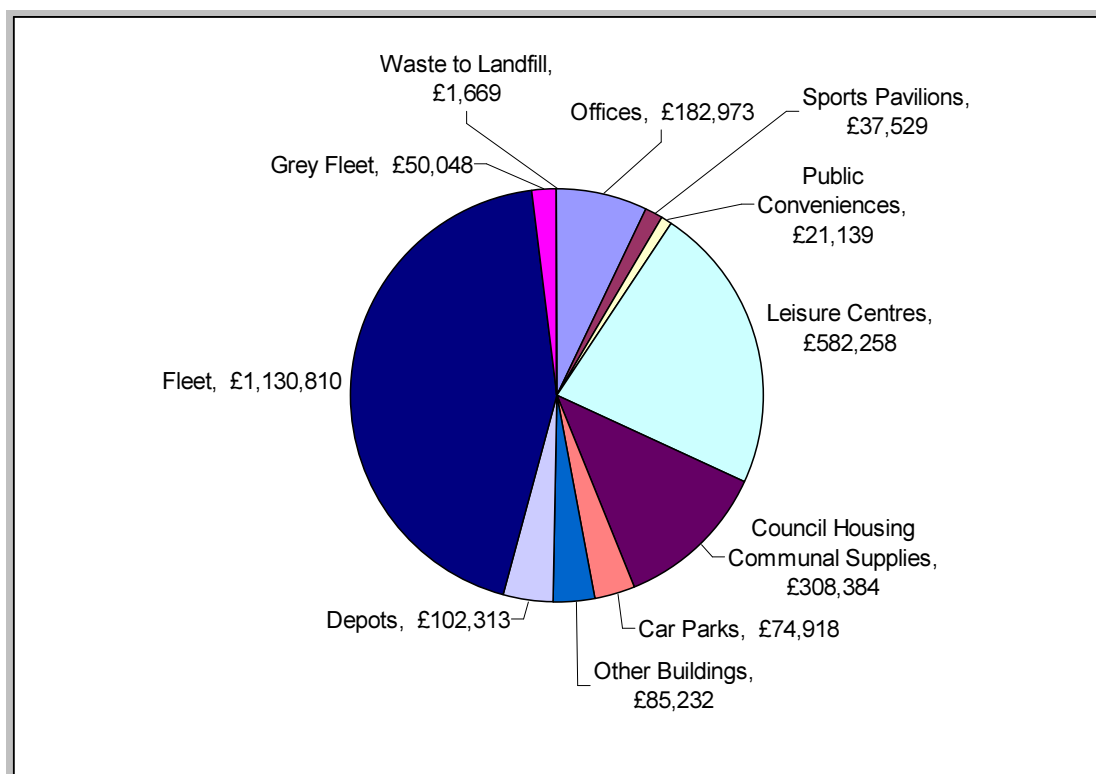


Figure 3: Breakdown of indicative annual energy/fuel costs (£) per year by category for 2010/11. (Waste to Landfill refers to Council operational waste only, not municipal waste)

## 5. Performance to date

In 2005/6 total CO<sub>2</sub> emissions for the original (more limited) scope was about 10,000tCO<sub>2</sub> (This is based on emissions factors for that period, excluding energy supplied to Council housing communal areas and other sites since identified). By March 2011, we had implemented a range of measures to reduce CO<sub>2</sub> emissions by 2500tCO<sub>2</sub> in line with our 25% target.

In 2011/12 the target was a 3% - ca 300tCO<sub>2</sub> - year on year carbon reduction, and measures have been implemented to reduce CO<sub>2</sub> emissions by 3% in 2011/12. Most carbon reduction capacity in Oxford City Council has come from a range of technical fixes and approaches such as:

- Pool covers;
- Lighting upgrades;
- Variable Speed Drives;
- Staff awareness programmes and active carbon champions network;
- Fleet energy reductions;
- Reductions in council generated waste sent to landfill; and
- Building disposals

Technical fixes have largely been funded using the Salix fund.

Other savings in the first phase of the carbon reduction plan have arisen from the transfer of IT server operations to County Council (ca. 200tCO<sub>2</sub>) and to a lesser extent from office rationalisation (Blue Boar Street disposal, 68tCO<sub>2</sub>). "Windfall" CO<sub>2</sub> savings such as these

account for only about 11% of the total 2,500tCO<sub>2</sub> figure for implemented carbon reduction measures.

## 6. Achieving CO<sub>2</sub> reduction targets to end 2016/2017

The Council intends to demonstrate leadership in carbon reduction across Oxford by extending our own target to an average 5% reduction year on year. (Pathfinder organisations signed up to Low Carbon Oxford Charter are currently committed to a 3% year on year target.) This move from 3% to 5% year on year, along with the widened scope of emissions falling within our boundary (described in section 4. above) represent a significant (ca 126%) stretch on our target. (ie. carbon reduction measures calculated to reduce 126% more CO<sub>2</sub> emissions need to be implemented in the period to end 2016/17 when compared to the previous scope/target – see below).

Using best available data for 2011/12, Table 1 (below) shows the way the target builds over the period to 2016/17. It can be seen that this results in an overall target for the period to end 2016/17 of implementing measures to reduce carbon emissions by **2396 tCO<sub>2</sub>** (ca 23% reduction over the period).

The following table shows the projected breakdown of annual reductions in CO<sub>2</sub> emissions to meet the 5% year on year reduction target:

Baseline year 2011/12*	(10,594*) tCO <sub>2</sub> /y	Average 5% target/yr , tCO <sub>2</sub> /y	Cumulative, tCO <sub>2</sub> /y
2012/13	10064 projected	530	530
2013/14	9561 projected	503	1033
2014/15	9083 projected	478	1511
2015/16	8629 projected	454	1965
2016/17	8198 projected	431	2396

Table 1: Breakdown of year on year projected reduction targets: Oxford City Council carbon management plan 2012-17

\* based on 300tCO<sub>2</sub> (3% target for 11/12) less than 2010/11 total (10894tCO<sub>2</sub>)

It should be noted that the 5% year on year target and new widened scope means that measures will need to be implemented in the period to end 2016/17 that result in 126% more carbon emissions than with the original scope including the 3% year on year target.

### Carbon reduction measures that need to be implemented to end 2016/17:

Original emissions scope (c.7500 tCO<sub>2</sub> in 11/12),

and old 3% year on year target

= 1059tCO<sub>2</sub>

### **New widened scope, 5% year on year target**

**= 2396 tCO<sub>2</sub> (+126%)**

This is an ambitious stretch, to be delivered within existing staffing resources. It is recognised that to achieve this target each year there will need to be full and sustained corporate engagement, building upon the earlier experience. In this setting, the additional individual initiatives necessary to achieve the carbon stretch must be driven forward without requiring significant staffing resource. A contingency provision may be required to cover any variances.

### **How we will achieve our annual reduction targets**

Stretching the target from 3% to 5% and increased scope means that it is vital that we have full engagement from all Service areas of the Council over the next 5 years. This is anticipated to be difficult as every department is moving to leaner delivery of their priorities and they do not necessarily overlap with those of the carbon management plan. It is envisaged this full cooperation will maximise the possibility of achieving our 5% reduction target via the following measures and approaches over the 5 years to 2016/17:

- **Salix and Salix-Plus funded energy efficiency measures in buildings**

Continue to build on the use of the £405k Salix revolving loan fund to realise the installation of energy savings technologies in OCC buildings and sites. For example LED lighting upgrades, pool covers (and pool heat retention/reduction), variable speed drives, more energy efficient boilers, insulation measures etc. Use of Salix-Plus fund (£300k assigned to resource the stretched target from 3% to 5% year on year carbon reduction) for projects with paybacks beyond 5 years and for use on non-building related carbon reduction saving projects.

**Estimated saving: 800tCO<sub>2</sub>/yr**

- **Active energy management – monitoring and targeting – ISO 50001/Energy Management systems**

Maintain and consolidate ongoing activity in the area of dynamic energy management approaches using smart meter data to assess expected versus actual consumption at City Council sites. Continual assessment and communication of building energy consumption data and escalation of consumption anomaly issues as they are identified. Continue the roll out of Smart meters across the estate where viable (and extend to water for core sites where viable).

**Estimated saving: 200tCO<sub>2</sub>/yr**

- **Estate rationalisation**

The Council will continue to look at ways to rationalise our building footprint for carrying out Council operations, consolidating buildings and moving to modern working styles. This includes office, depot and leisure centre rationalisation such as combining two depots/operations into one site, disposal of Ramsay House, and three leisure centres in to one (new competition pool at Blackbird Leys Leisure Centre with disposals of Blackbird Leys swimming pool and Temple Cowley swimming pool).

**Estimated saving: 650tCO<sub>2</sub>/yr**

- **Member, Contractor and Staff energy awareness activities**

Continue to develop the Council's active network of Carbon Champions to help promote the aims and rationale behind carbon and energy reduction activities and to identify and target any areas for energy efficiency improvements in estates buildings and operations.

Provide regular communications through email, intranet and notice boards on the Council's progress against annual CO<sub>2</sub> reduction targets and highlight good performance in office buildings where viable (eg develop floor by floor targets/competition in St Aldates Chambers offices where submetering of electricity, gas and water will allow this).

**Estimated saving: 100tCO<sub>2</sub>/yr**

- **Waste reduction activities**

Develop a robust Council-wide recycling system reducing the amount of operational waste sent to landfill sites and increasing recycling rates for Council generated waste. Ensure that waste collection data systems are in place to effectively track performance.

**Estimated saving: 100tCO<sub>2</sub>/yr**

- **Fleet energy reduction**

Installation and use of vehicle monitoring systems to optimise fleet performance and ongoing eco-driver training courses to ensure optimal use of vehicles by Council staff. Continue to investigate use of lower carbon fleet technologies and drive down annual energy consumption in fleet vehicles. Provide incentives to staff to use bicycles or public transport to conduct council business rather than use staff-owned vehicles where possible. Further development and consolidation of the Staff Workplace Travel plan.

**Estimated saving: 150tCO<sub>2</sub>/yr**

- **Renewable Energy installations – Solar PV and biomass**

Make the best use of supporting mechanisms for the installation of renewable energy technologies across the estate. For example, using the Feed-in-Tariff (FiT) for improving the business case for Solar PV electricity panels and the Renewable Heat Incentive (RHI) for biomass installations at viable sites.

**Estimated saving: 150tCO<sub>2</sub>/yr**

- **Use of Energy Services Companies / Energy Performance Contracts**

Review the options for using Energy Services Companies (ESCOs) for management of new heat/electricity installations on sites (eg use of biomass boilers and management and supply of wood chips/pellets), or Energy Performance Contracts (EPCOs) for large scale carbon reduction projects across the estate.

**Estimate saving: 100tCO<sub>2</sub> – linked to large scale retrofits for energy efficiency**

- **Carbon budgeting/accounting**

Implement carbon budgeting/accounting system setting annual CO<sub>2</sub> targets per service area/cost centre with potential penalties/rewards for over/under shooting on targets (tbc). This will raise awareness of the need to monitor and reduce carbon emissions and hold departments accountable for performance. Full engagement with carbon accounting process should bring forward carbon reduction opportunities as part of planned works as well as better housekeeping resulting in reduced carbon emissions.

**Estimated saving: 150tCO<sub>2</sub>/yr**

**Total estimated potential annual savings over 5 years identified above: 2,400 tCO<sub>2</sub>**

## **7. Funds and resources**

Based on extrapolation from experience and expertise built up in meeting the 25% and 3% carbon targets from 2005/06, it was identified that in order to deliver the 5% year on year carbon reduction target the following additional resource would be required:

- a £300k Salix style revolving loan fund for investment in carbon reduction measures, with less restriction than the existing Salix fund, and

The £300k (Salix plus) revolving fund bid was approved in the 2010/11 budget process (and is available from 2013/14).

It is proposed that the new £300k revolving loan fund will mimic the rules of the existing £405k Salix fund and allow a project management fee for delivering a carbon reduction project to be wrapped up in the project cost and form part of the amount that is re-paid. This will mean that funds could be employed to pull in expertise to assist in developing projects up to full implementation. This will impact on the total available to spend on carbon reduction measures and will be kept under review.

### **Unlocking the potential of the Salix fund across the Estate**

The main mechanisms for funding low carbon technology fixes across the estate in the period to end of 16/17 are the Salix £405k revolving loan fund and the £300k **Salix-Plus** fund (available from 2013/14).

Salix is currently only able to be used in buildings and other sites within the estate – where paybacks must, in general, be 5 years. The Salix-Plus fund is an additional £300k internal pot of money to be used in a similar way to Salix – however it will provide opportunities for use of funds where Salix is currently not possible e.g. if the paybacks are beyond five years or for use on non-building related energy savings. This could include improvements in fleet technologies or reduction in waste sent to landfill that will lead to reduced carbon emissions.

Although many easily accessible “lower-hanging fruit” projects for carbon reduction using Salix funds have been realised there is no shortage of potential across the estate to maximise use of the Salix fund. However proactive input from all parts of the Council in unlocking the potential of the Salix fund will be crucial in meeting our annual carbon reduction targets.

Salix money can fund up to 5 times the monetary value of energy saving potential of any viable upgrade measures (e.g. lower energy lighting, heat recovery systems, insulation measures). This will mean that Salix can provide added leverage to project funds and make project budgets go a lot further. The following areas currently present significant potential for use of the Salix fund but require working of Salix spend into the existing project plans:

- Community Centres upgrade: Many community centres are in line for major upgrade/refurbishment work which could present a good range of Salix spend potential
- Depot rationalisation project: closing of two depots and construction of completely new multi-functional site
- Public conveniences: All City council owned public conveniences are in line for major upgrade/refurbishment
- Pavilion modernisation: Many pavilions are in line for major upgrade/refurbishment and new build which will present Salix funding opportunities
- Leisure centre ongoing improvements/upgrades in partnership with Fusion
- Communal areas of council housing stock where the council pays the energy bills
- Opportunities for use of Salix in any upgrade work that may emerge from the Estate-wide building condition survey £7m project underway

The technical advancement of certain technologies over the last 18 months will also lead to new projects – such as with the deployment of LED lighting which presents knock on benefits of reduced maintenance and lamp replacement costs.

The key to unlocking the potential of the fund is ensuring that Salix opportunities are fully considered at the appropriate stages of the projects and that due consideration is given to working up the potential savings/costs that are required to assess for Salix viability. Proactive input from all relevant parts of the Council is required to ensure projects are identified and worked up into Salixable projects.

The Energy & Climate change team has the resource to do the bulk of the energy assessments and calculations required (or get technical help where required), the projects need to be rapidly identified by relevant teams managing the projects and factored in to considerations where work is underway on buildings or being considered for upgrade, refurbishment or replacement of old kit being planned.

The above present broad headline areas that present new additional Salix spend opportunities and need to be advanced as quickly as possible to build up a critical mass of

Salix funded projects going forward and to ensure meeting of annual Carbon reduction targets with existing resources.

### **Programme coordination**

The carbon management programme will continue to be coordinated by the Energy & Climate Change team in Environmental Development with support and crucial input from Corporate Property, City Leisure and Direct Services (Fleet and waste management) teams. This will follow the current pattern of regular Salix and Carbon reduction review meetings with Corporate Property and the Council/Fusion Carbon management meetings.

The Energy & Climate Change team will coordinate delivery of the key corporate priority of the carbon management programme 5% year on year target described above (along with other corporate targets of 3% year on year reduction in water use across the estate, and 40% carbon reduction across the city by 2020 via council-side management of the Low Carbon Oxford programme and other initiatives such as Oxford Green Deal-Plus). It is currently resourced as follows:

Paul Robinson, Team Leader Energy & Climate Change,

Paul Spencer, Energy and Carbon Manager,

Andrew Sunderland, Assistant Energy Officer (currently on a fixed-term contract to March 2013),

Jenny Carr (Sustainable Energy Officer).

Estate wide support and input (including full cooperation from Fusion Lifestyle Ltd managing the leisure centres) to the programme will be essential to delivering the CO<sub>2</sub> reduction targets.

### **8. Governance/ownership**

All employees are responsible for contributing to the ongoing reduction of carbon emissions and to meeting targets in line with the Corporate Plan's aspirations to ensure that carbon reduction is at the heart of all of the Council activities. Carbon reduction activities/targets could be included in departmental/personal objectives to help to embed this in to Council day to day operations.

The plan will be owned and governed by the Cleaner Greener Board, with critical input from the Carbon and Natural Resource Members Board (key officers, Cleaner Greener portfolio holder and representatives from the other main parties).

Regular highlight reports to Boards will assess progress against the Carbon Management Plan objectives in the Environmental Sustainability Team Milestone Plan. Any blockages with progress on specific areas of the plan will be escalated through Cleaner Greener Board without delay.

Re-instigation of a Carbon check approval process or similar mechanism (eg scrutiny of/intervention on Forward Plan) for all City Executive Board and other major Council reports will identify any potential impacts on/opportunities for the carbon management plan and 5% target. These could include planned building disposals (which lead to a reduced CO<sub>2</sub> footprint), refurbishments or other changes to estate operations that may present Salix or Salix-Plus funding options or any measures that may lead to an increase in annual CO<sub>2</sub> emissions such as building extensions, fleet fuel consumption increases due to changed collection rounds, etc.

The impacts of any CEB proposals should also be quantified in terms of their CO<sub>2</sub> impacts with a total tCO<sub>2</sub> figure estimated (eg if there is a proposed change of business operations to be able to assess the potential scale of overall increase/reduction in CO<sub>2</sub> emissions)

The plan will be reviewed quarterly for progress against milestones/target and reviewed quarterly by Cleaner Green Board and periodically by CNRMB each September of the following year outlining overall progress towards meeting the year on year targets.