

Report of: Head of Environmental Development,

To: City Executive Board

Date: 26th November 2008

Item No:

Title of Report:

Carbon Management Programme – progress to date and next steps

Summary and Recommendations

Purpose of report: This report will: update members on progress with the Council's *Getting Our House in Order* Carbon Management Plan, in line with the resolution of April 2008; highlight the budgetary position regarding the programme and recommend arrangements for the Salix carbon reduction fund to maximise carbon saving.

Key decision: Yes

Board Member: Councillor John Tanner

Report Approved by:

Legal: Jeremy Thomas

Finance:

Policy Framework: Corporate Plan 2008-2011 – Tackle Climate Change & Promote Environmental Resource Management.

Recommendation(s)

The Board is RECOMMENDED to:

- (1) note progress reported towards attaining the 25% carbon reduction target from Council operations and buildings by 31 March 2011, in particular progress toward the 2008/09 interim target of 8%;
- (2) note that the energy and resource management programme is funded to the end of the 2009/10 year but not beyond this date;
- (3) note the estimated financial shortfalls for projects that fall outside Salix funding from 2010/11 onwards
- (4) agree arrangements for the Salix carbon reduction fund, which needs to offer a revolving loan facility, be ring-fenced, and roll over from year to year, in line with the Carbon Trust criteria when the matched funding award was made.

City Council Role

1. Local Authorities are charged with leading the local carbon reduction agenda, so must set a good example in the management of carbon emissions from their buildings and operations. They must also do so in adapting to unavoidable climate change already in the system, by future proofing services, buildings and operations from extreme weather events. This is reflected in the National Indicators that local government have to report progress against annually: NI185 Percentage CO2 Reduction from LA Operations; NI186 Per Capita CO2 Emissions in the LA Area; and NI188 Planning to Adapt to Climate Change.

Internal Programme

2. 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 with support from the Carbon Trust following a 5-step tried and tested process to develop a five year plan to manage and reduce carbon dioxide emissions across the Council's buildings and operations.
3. The product of this process was the Oxford City Council Carbon Management Strategy and Implementation Plan (SIP) which has the overarching aim of mapping a path to a lower carbon Council over the next 5 years and beyond. In April 2008 the Carbon Management Programme for Oxford City Council, "Getting our House In Order" was formally adopted. The Portfolio Holder and the Carbon Trust have recently approved some minor amendments to the SIP (see background document for final version of *Getting Our House in Order*).
4. It should be noted that the SIP runs from April 2008 to March 2013, whereas the programme to achieve the 25% target runs until March 31 2011. Thereafter the target is 3% reduction per annum.
5. A revised Governance structure has also been agreed and "Getting our House in Order" now features as a key cross-cutting part of the Transformation Programme impacting on, and the responsibility of, all sectors of the Council – See Appendix 1: Governance chart and Appendix 2: overview of where the Carbon Management programme fits within the overall Transformation programme.
6. 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. The SIP outlines how we can meet and potentially exceed this target with long-term political and cross-Council commitment to the Carbon Management Programme.

Funding

7. Of the 20 projects identified in the SIP, 14 are funded at this stage with the balance requiring attention. A future report will be made to quantify this gap in more detail. This gap need not halt progress towards the targets in this or next year. Salix funding may be able to help reduce this gap, though it will not eliminate it altogether. (See Financial Implications section below and Appendix 6 for initial high level overview of potential shortfalls in key non-Salix funded projects)
8. **Salix carbon reduction fund:** In November 2007, the City Council successfully won external matched funding to implement carbon reduction technologies across the Council. A total of £400K is now in place: £200K from Carbon Trust matched by £200K from the Council. Winning the Salix funding required going through a rigorous multi-stage process with independent industry assessors appraising OCC's proposed carbon saving measures and infrastructure in place to deliver the programme across the authority. In line with Carbon Trust requirements, the Salix fund needs to be set up as a ring-fenced, revolving loan fund (investments in carbon reduction measures are repaid to the fund from energy savings) Maximum payback allowed is 5 years. It is estimated that the Salix fund will meet around £600k of capital expenditure over the 5-year SIP implementation period covering a significant proportion - but not all - of the buildings related projects (SALIX fund itself is expected to be in place beyond the SIP, ie. a life of 10-15 years).
9. The energy and resource management function budget is also a vital part of carbon management and is currently funded at a level of £80k per year until end 09/10. A continued budgetary commitment is required beyond this period as energy and resource management saves money as well as carbon – which with rising costs is of increased corporate importance.
10. Projects that fall outside of Salix or other funding outlined above, mostly cover non-building related, softer projects, such as implementing sustained staff awareness campaigns, developing the sustainable travel plan, fleet emission reduction projects and internal recycling schemes. Internal *Invest-to-save* bids are one source of funding that might meet this shortfall. More ambitious schemes which would not be achievable via Salix (e.g. onsite renewable and very low carbon energy installations, larger more infrastructural energy efficiency projects) may need budgetary bids to realise progress. Business cases for these will be developed in year 2009/10 as focus of much of work in years 1 and 2 will be on Salix related projects.

Performance

Targets and performance against targets for carbon reduction are detailed in Tables 1. and 2.

Table 1: Targets: Carbon reduction targets in OCC buildings and operations

Targets for carbon reduction on 05/06 baseline:	2008/09	2009/10	2010/11	Total
Tonnes CO2	800	800	900	2500
%	8	8	9	25

Table 2: Progress: carbon reduction from installed measures and committed actions (see Appendix 3 for detail).

Installed measures and committed actions: Carbon reduction on 05/06 baseline	2008/09		2009/10		2010/11		Total	On target ?
	1 st half yr	2 nd half yr	1 st half yr	2 nd half yr	1 st half yr	2 nd half yr		
Tonnes CO2	556	-	-	-	-	-	556	Yes
%	5.6	-	-	-	-	-	5.6	Yes

This table will be updated as projects progress to capture achievement. A summary of progress against the 5 high-level objectives in the SIP can be found in Appendix 4.

Next steps

11. Wider carbon reduction activities and initiatives - described in Getting Our House in Order – will be captured in PID (Project Initiation Document) format. This will be done by project owners in Services across the Council and will aid project management, high level reporting and scheduling of carbon savings to 2013. Carbon Management Team will ensure any future problems with meeting the 2011 25% target will be flagged early, facilitating remedial action. Launch events to local media, staff and community environment groups are planned in November /December.
12. Planning for 2013 & beyond – Carbon Management Board is considering what measures need introducing now to ensure we can meet targets in 2013 and beyond. These could include: more ambitious low carbon approaches such as installation of large renewable energy installations.

Financial Implications

13. In financial years 2008/09 and 2009/10 we will be able to meet the milestone targets on route to meeting the 25% target, with Salix funded projects and no cost/low cost measures that can be covered by existing budgetary provisions. It has already been agreed that Service areas will be using their own staff resources to deliver the agreed projects.
14. In financial year 2010/11 there are 6 key broad project areas that will be unfunded with total estimated costs of £174K being required to bring all projects identified in Getting our House in Order on stream and maintain current momentum towards meeting our 2010/11 target and beyond. (see Appendix 6 for overview of funding requirements for non-Salix projects)

Table 3: programme funding overview

Year	2008/09	2009/10	2010/11 and beyond
Funding	Salix pot/Existing budgetary provision	Salix pot/Existing budgetary provision	Salix pot plus estimated £174K per year budgetary requirement

Risk Management

15. There is sufficient flexibility in the projects identified in Getting our House in Order to achieve the yearly targets should one or more projects slow for unavoidable reasons.
16. In order to meet the strict requirements of the Salix fund, it is essential that the Salix fund is maintained as a ring-fenced fund within the Council's financial system. There is a risk that funding could be withdrawn if this and other strict criteria of the fund are not met.

Equalities

17. With any key projects in Getting our House in Order we will strive to consider implications for and improve services for people of all backgrounds. All projects will be assessed for any potential impacts on individuals with physical impairments/disabilities, non-English speaking residents and have consideration for the many and diverse cultural groups in Oxford. For example, communications messages of any achievements from the Carbon management programme will be tailored to needs of the above where necessary; any larger scale capital projects will also be assessed for impacts on the above groups.

Legal implications

18. There are no legal implications.

Climate change Impacts

19. Getting our House in Order is ofcourse the key vehicle for meeting our challenging carbon reduction targets to 2010/11 and beyond. It is a proactive approach to playing our part as a large organisation and community leader.

Recommendations

20. Council is recommended to:

- (1) note progress reported towards attaining the 25% carbon reduction target from Council operations and buildings by 31 March 2011, in particular progress toward the 2008/09 interim target of 8%;
- (2) note that the energy and resource management programme is funded to the end of the 2009/10 year but not beyond this date;
- (3) note the estimated financial shortfalls for projects that fall outside Salix funding from 2010/11 onwards
- (4) agree arrangements for the Salix carbon reduction fund, which needs to offer a revolving loan facility, be ring-fenced, and roll over from year to year, in line with the Carbon Trust criteria when the matched funding award was made.

Name and contact details of authors:

Paul Spencer
Climate Change Officer, Environmental Development
Tel: 25(2238)
pspencer@oxford.gov.uk

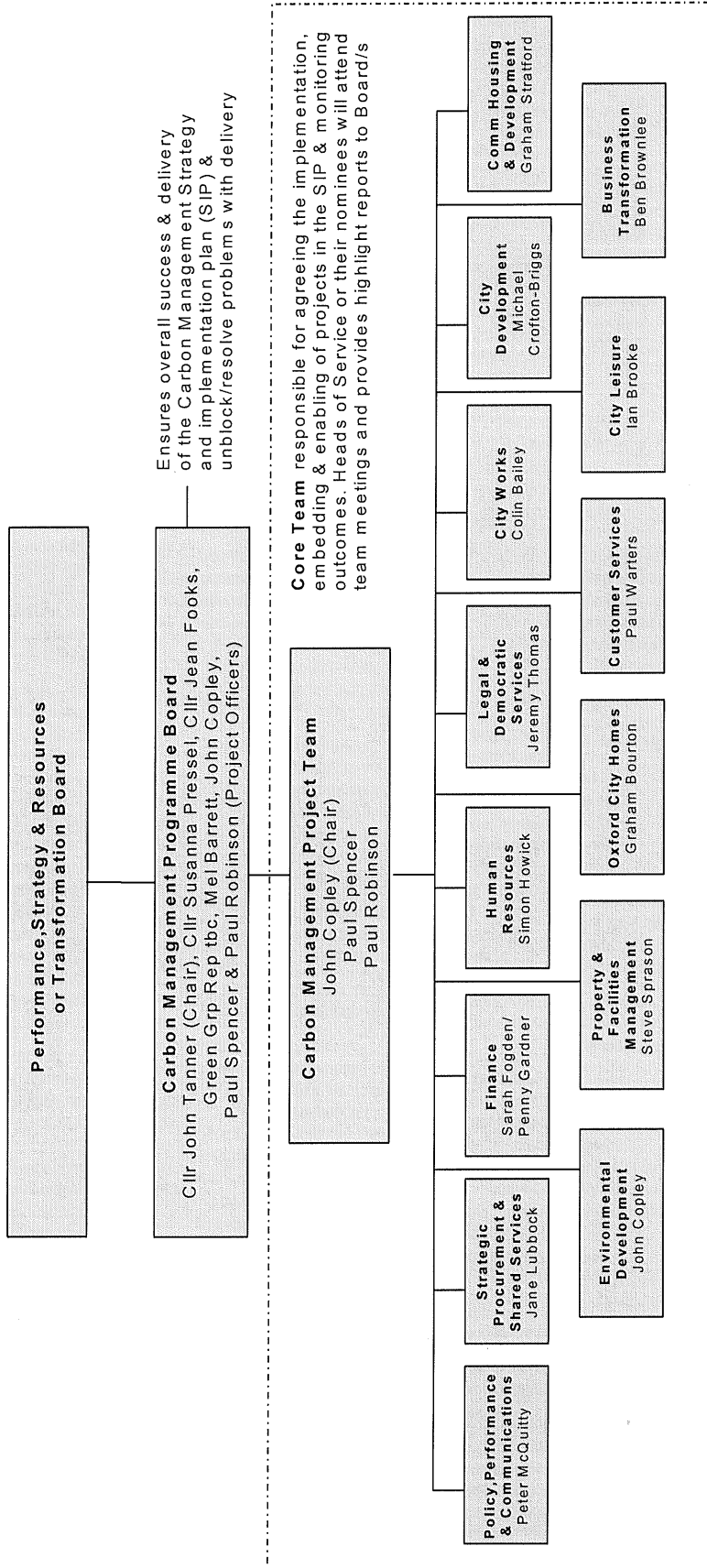
Karen Ravenhill
Strategic Projects Manager, Chief Executive's
Tel: 25(2349)
kravenhill@oxford.gov.uk

Background papers:

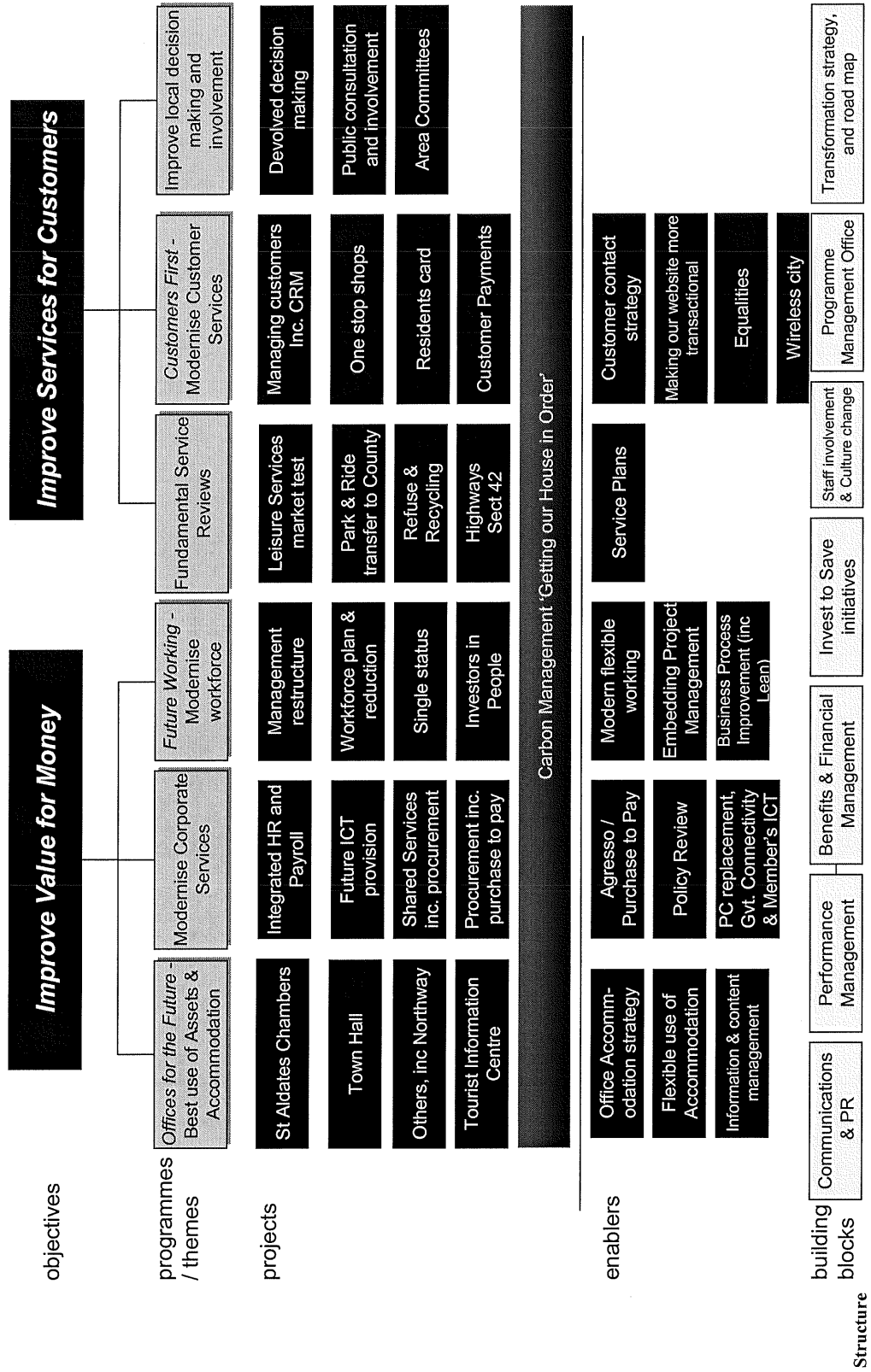
OCC Carbon Management Programme – SIP (66 pages)
Automated Meter Reading (AMR) – invest to save bid

Appendix 1: Carbon Management Governance

Carbon Management Governance Structure – draft Oct 08

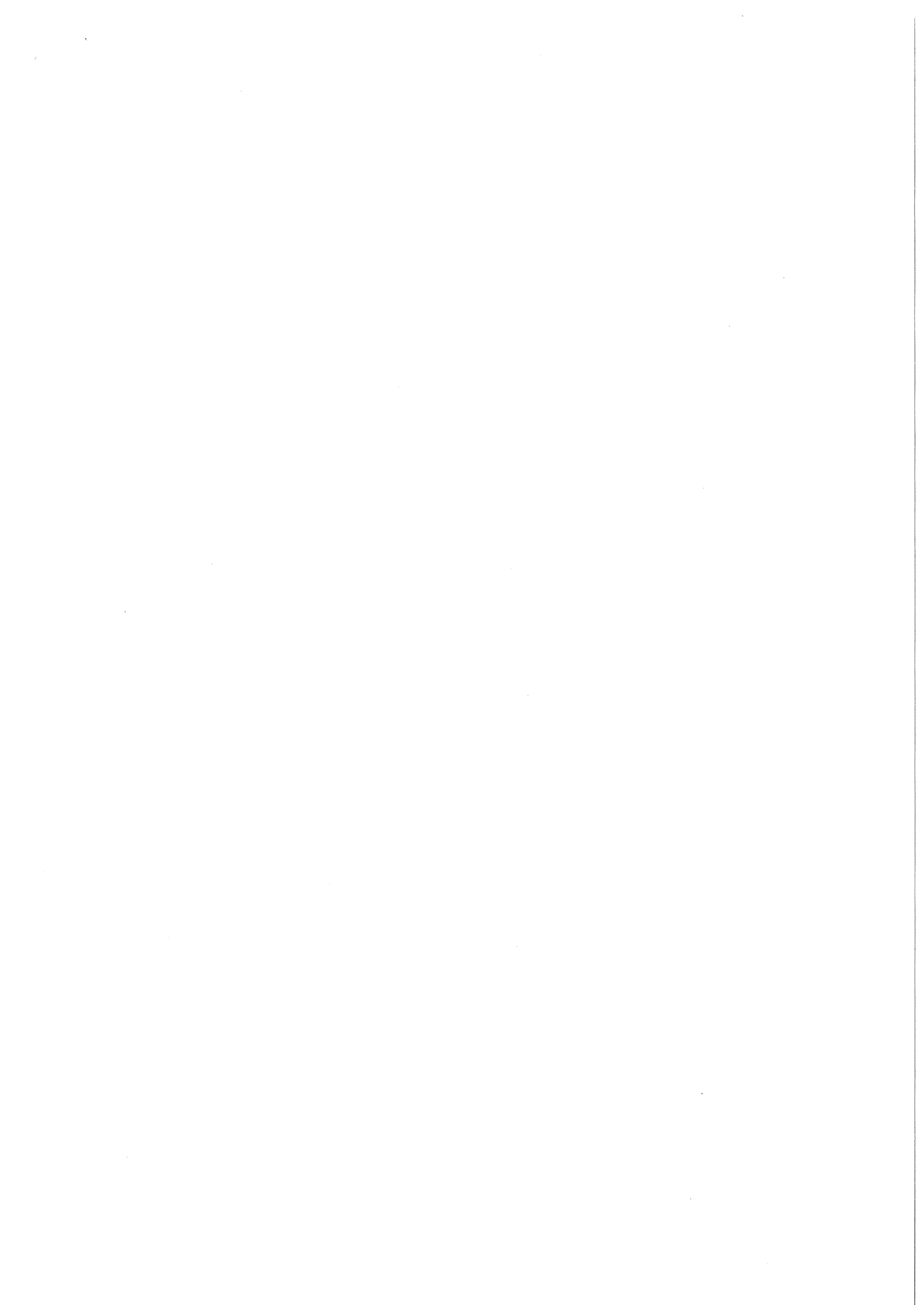


Appendix 2: Transformation overview (highlighting carbon management programme as cross-cutting project)



Appendix 3: Carbon reduction from installed measures and committed actions, 08/09

Project/Action	Carbon reduction from installed measures and committed actions	Costs (actual installed or quote)	Source of funding
Voltage optimisation	First phase 2008/9: 3 installations planned at Town Hall, Blackbird Leys Leisure and Ice Rink.		
	Blackbird Leys Leisure Centre VO (30 tCO ₂ per year) – 5 July 08	£15 868	Salix
	Town Hall VO (33 tCO ₂ per year) – 26 August 08	£18 414	Salix
	Ice Rink VO saving tbc) – Nov 08 tbc		
	Ferry Pool Cover – motorised. (71 tCO ₂ per year) – April 08	£19 500	Salix
Pool covers (Liquid and motorised)	Blackbird Leys Pool Cover – motorised. (13 tCO ₂ per year) – April 08	£ 7 095	Salix
	Hinksey Pool – liquid. (92 tCO ₂ per year) – May 08	£ 4 980	Salix
	Temple Cowley Pool – Liquid (127 tCO ₂ per year – Nov 08 tbc (delay due to separate water quality issue – dosing pump installed)	£ 5 500	Salix
	Barton Pool cover was installed in 07/08		
Variable speed drives (Leisure centre air handling units and circulations pumps; Town Hall)	Across Leisure buildings on Air Handling units, and pool circulation pumps – installation tbc (quotes from 3 suppliers established awaiting resource availability in Leisure to implement)		
	Barton Pool circulation pump – 11.9 t CO ₂ per year	£ 3 022	Salix
	Blackbird Leys Pool – 26.8 tCO ₂ per year	£ 3 727	Salix
	Temple Cowley Pool air handling unit – 44.5 tCO ₂ per year	£ 7 735	Salix
	Ferry Centre Sports Centre air handling unit – 63.5 tCO ₂ per year	£ 10 387	Salix
Energy and water resource management (Monitoring and targeting (M&T), best practice, smart metering etc)	Ferry Centre Pool circulation pump– 18.4 tCO ₂ per year	£ 5 656	Salix
	Display Energy Certificates issued in time for the statutory deadline (1 st October 08)		
	Smart meter technologies installed at Barton Pool (10tCO ₂ per year) and Horspath Depot (15 tCO ₂ per year) (Sept 08)	£ 5 000	Energy resource management budget
	Foundation work on a move to e-billing arrangements at Oxford City Council (work with finance team on implementing Agresso/System link file routines)		
	Development of energy Monitoring & Targeting (M&T) database		
Totals	Installed measures/committed actions in first half of 2008/09: 556 tCO₂ per year.	£106 884	



Appendix 4: Summary of progress against 5 high-level headline objectives in the SIP

Objective	Achievement to date
<ul style="list-style-type: none"> • Reduce Council CO₂ emissions by at least 25% by 2010/11 (against the 2005/6 baseline) [and 3% year on year savings going beyond 2010]. 	<p>A range of technological carbon saving measures have been installed in OCC facilities. See Table 2 for high-level view and Appendix 3 for details.</p>
<ul style="list-style-type: none"> • Determine and implement an accurate and robust CO₂ emissions accounting system that can be used year on year to assess progress. 	<p>Buildings: Energy Monitoring and Targeting (M&T) database currently under development (working closely with utility companies to streamline data capture and billing arrangements (move towards e-billing/centralised payment) Automated Meter Reading/Smart metering invest to save bid submitted in Nov 08 – (awaiting outcome at time of writing)</p>
<ul style="list-style-type: none"> • Secure resource deployment (financial <u>and</u> people) to achieve effective carbon reduction throughout the Council. 	<p>Salix funding of £400k in place and being spent - £100K committed so far to date – with a strong list of future Salix projects in the pipeline</p>
<ul style="list-style-type: none"> • Raise awareness of climate change amongst staff, elected members and our public/partners and help to involve them in carbon management actions. 	<p>Won 50% carbon trust funding to develop bespoke staff awareness campaign- running from Nov 8 onwards Series of Getting our House in Order launch events to staff, community groups and public beginning in Nov/Dec 08</p>
<ul style="list-style-type: none"> • Embed carbon management and climate change best practice into corporate policy and management practice (including the budgetary process) across Oxford City Council. 	<p>Carbon check system now in place – all CEB reports are reviewed and assessed for carbon impacts or opportunities prior to approval In addition all future/proposed projects or invest-to-save ideas must include a “carbon impact” statement</p>

Appendix 5: Next Steps

Other projects in planning stage that will start to reduce carbon	
Staff awareness/Energy champions network	<p>50% funding gained from Carbon Trust to develop bespoke staff awareness campaign (August 08)– tenders received from 3 external consultancies to carry out work (23 Sept 08) – Decision made on consultancy following interviews/references (Clouds) 10 Oct 08— aiming to begin programme Nov 08.</p> <p>Series of launches and PR on Getting our House in Order planned for October through to December (staff launch at Oxford Castle – alongside Earth From the Air exhibition, Community group event at Town Hall with Lord Mayor, Press opportunity/photocall, staff outreach events from Jan 09 – held at individual sites across Council (Horspath Depot, Cowley Marsh Depot etc): talks/seminars, energy surgeries, etc</p>
Energy and water resource management (Monitoring and targeting (M&T), best practice, smart metering etc)	Build on work already underway to increase carbon savings from best practice energy and resource management
Business systems energy saving related projects: E.g. PC hibernation; Server Virtualisation; thin client etc	PID to be scoped and established – as raised and actioned at first Carbon Management Team meeting (17 October 08)
Internal recycling scheme	<p>PID to be scoped and established – as raised and actioned at first Carbon Management Team meeting (17 October 08)</p> <p>Possible funding from Oxfordshire Waste Partnership.</p>
Lighting upgrades (e.g. Retrofit lighting; lighting controls etc)	PID to be scoped and established – as raised and actioned at first Carbon Management Team meeting (17 October 08)
Cavity Wall insulation	PID to be scoped and established – as raised and actioned at first Carbon Management Team meeting (17 October 08)
Reduce fleet CO ₂ emissions	PID to be scoped and established – as raised and actioned at first Carbon Management Team meeting (17 October 08)
Sustainable Travel Plan	PID to be scoped and established – as raised and actioned at first Carbon Management Team meeting (17 October 08)

Appendix 6: Funding overview and potential shortfalls (Non-Salix projects) beyond 2009/10

Project	2008/9	2009/10	2010/11 and beyond
Staff Awareness/Carbon champions	50% funded by Carbon Trust	No cost/low cost measures	£10k per year
Internal Recycling Scheme	No cost/low cost covered by existing budgetary allowances plus Funds to be applied for from Oxon Waste partnership	No cost/low cost covered by existing budgetary allowances	£7k per year (depending on funding applications in 08/09)
Reduce fleet emissions	No cost/low cost covered by existing budgetary allowances	No cost/low cost covered by existing budgetary allowances	£15k per year
Sustainable travel plan	No cost/low cost covered by existing budgetary allowances	No cost/low cost covered by existing budgetary allowances	£12k per year
Onsite renewable energy/Community scale renewable energy projects			£50K per year (minimum depending on nature of RE project and external funding opportunities identified)
Energy Management function	Funded	Funded	£80K per year (essential)
Totals			£174K per year

Communities and Partnership Scrutiny – 12th November 2008

Extract from the minutes.

33. CARBON REDUCTION MANAGEMENT

The Head of Environmental Development submitted a report (previously circulated, now appended). Paul Robinson (Sustainable Energy Officer) presented the report to the Committee, and answered questions from members of the Committee.

Key issues highlighted by the Committee included ensuring efficient and carbon neutral heating systems in Council owned property, with special reference to the Town Hall and Community centres, wind energy, and ensuring green issues were highlighted on planning applications. The Committee welcomed all the good work carried out so far. Paul Robinson explained that the issue was to be presented to the City Executive Board arising from an earlier promise to report the progress on targets to it.

Resolved to:-

- (1) Welcome all the positive steps taken so far towards promoting and ensuring good environmental and carbon management by the City Council;
- (2) Note that issues round fluctuating heating levels within the Town Hall need to be addressed, and ask that this be done;
- (3) Advise that any documentation concerned with this issue should be as reader-friendly as possible, and should explain terms used in ways that would be readily understandable by all readers;
- (4) Recommend to the City Executive Board that it should ensure that there was sufficient funding available to continue the good work on carbon reduction management.