

**Progress report on LAA2 target, NI 185 Percentage CO<sub>2</sub> reduction from LA operations**

**1 Introduction**

1.1 The NI185 working group have calculated their baseline emissions which has been set at 93,206 tonnes of carbon in 2008/09 (West Oxfordshire District Council may have to review their baseline due to an error in submissions by their waste contractor).

A commitment has been made to reduce the baseline figure by 6% in total by March 2011. Each Local Authority has committed to a percentage reduction in their own emissions (table 1) to ensure all authorities contribute to the target.

**2 Progress on LAA2 targets in Q3**

Below is a summary of the footprint information for each local authority and the targets they have committed to.

2.1

**Table 1:**

	<b>Baseline (tonnes) 2008/2009</b>	<b>% CO<sub>2</sub> Reduction Committed to by 2011</b>	<b>Anticipated CO<sub>2</sub> Reduction (in tonnes) over 2 Years</b>
<b>Vale of White Horse</b>	5,423	8%	433
<b>Oxford City Council</b>	8,676	15%	1301
<b>Oxfordshire County Council</b>	65,259	4%	2610
<b>Cherwell District Council</b>	5,002	6%	300
<b>West Oxfordshire District Council</b>	3,754	6%	225
<b>South Oxfordshire District Council</b>	5,092	20%	1018
<b>Total</b>	93,206		5889
<b>Total % reduction</b>			6.0

- 2.2 Each LA has been collecting data quarterly and has collated the information (see table 2) to help understand the progress made so far towards the target. The data is estimated, however the predicted saving by March 2010 is 5% this information does not an anticipated figure for Cherwell District Council (see annex one paragraph 2.4).

**Table 2: Emissions data between April 2009 (Q1) – December 2009 (Q3)**

	<b>CO2 emissions (tonnes) Q1 – Q3</b>	<b>Anticipated CO2 emissions (tonnes) by March 2010</b>	<b>Tonnes saved/ increase d</b>	<b>Anticipated % saved by March 2010 (based on Q3 figures)</b>	<b>On target?</b>
<b>Vale of White Horse</b>	3,490	4,662	761	14%	Yes
<b>Oxford City</b>	5,970	7,960	716	8%	Yes
<b>Oxfordshire County</b>	41,703	63,204	2,055	3%	Yes
<b>Cherwell District</b>	3,431	x			
<b>West Oxfordshire</b>	2,765	3,686	26	1%	No
<b>South Oxfordshire</b>	3486	4609	483	9%	Yes
<b>Total</b>				5%	

### **3 NI185 Delivery Group Plans for 2010/11**

- 3.1
1. Continue to deliver CO<sub>2</sub> savings through various project
  2. Monitor data quarterly
  3. Share CO<sub>2</sub> saving ideas, such as an energy saving bus, reduction of ICT energy use, and insulation of buildings
  4. Report on the end of project savings in July 2011
  5. Work together to share ideas and where possible projects and costs
  6. Opportunities workshop

### **4.0 Risks**

- 4.1
1. Difficulties obtaining data quarterly may lead yearly estimates to be incorrect
  2. Difficulties with baseline calculations in some areas (see annex 1 paragraph 2.4 and 3.4, may mean increased CO<sub>2</sub> emissions
  3. Each Local authority has experienced some difficulties with data collection, either finding an error in the baseline, or with data currently being provided. These difficulties could lead to inaccurate information regarding our final savings.

We are working to mitigate these risks by monitoring data collection closely, any concerns are discussed with Department of Energy and Climate Change, in efforts to resolve them

## 5.0 Conclusion

Each of the Local authorities have improved their processes to enable data collection and monitoring. A large number of projects have taken place and have achieved savings; more is planned for 2010/11 (see annex one for details).

Report produced by:

Vickie Cossins, target lead for NI 185

## Appendix 1.0: Outline of progress for each local authority

### Annex One

#### Outline of progress for each Local Authority

##### 1. Current Status: Oxfordshire County Council

Whilst some transport and building data has been estimated while OCC are waiting for the final invoices to arrive, it is predicting a 3% reduction in emissions for 2009/10. If this result is achieved, the council will be on target to reduce its carbon footprint by 4% by 2011

##### 1.1 Emissions up to 3<sup>rd</sup> quarter 2009/10

	Quarter One	Quarter Two	Quarter Three	Total	Predicted year end	Anticipated Reduction from 2008/09 baseline	Anticipated % Reduction from 2008/09 baseline
<b>Buildings</b>	6,799	6,799	10,818	24,416	44,416	1,785	
<b>Transport</b>	1,145	1,458	1,541	4,144	5,744	-1,473	
<b>Street lighting</b>	2,970	5,238	4,935	13,143	13,044	1,743	
<b>Total</b>	<b>10,914</b>	<b>13,495</b>	<b>17,294</b>	<b>41,703</b>	<b>63,204</b>	<b>2,055.2</b>	<b>3.1</b>

\*25% of building emissions has been estimated in Q3, some invoices have not been provided by the supplier yet

##### 1.2 Financial

In February Council agreed a carbon reduction budget of £1,315k which includes;

1. £300k increased carbon reduction support to schools (the county council is in the process of recruiting to schools sustainability posts and consulting schools on a schools carbon reduction strategy).
2. £550k for street lighting works
3. £465k for property efficiencies

### **1.3 Progress to date for financial year (09/10)**

1. Agreed two new schools posts to assist with carbon reduction
2. The street lighting service has installed a large amount of energy saving equipment, such as photo cells, LED's in Zebra crossing lamps and bollards.
3. Samuelson House (a new County Council office building) has achieved BREEAM excellent status. This means that the building has achieved the highest possible standards for building sustainability, solar panels, rain water harvesting and zoned lighting are all in place on site.
4. Initiated a trial of 4 BMW to electric minis at County Hall
5. Worked with schools to install more efficient equipment such as boilers and new lighting controls
6. Supported the development of a schools climate change video
7. Launched of the energy bus, as part of the Energy Busters Project
8. Have been rated 9<sup>th</sup> in country for the number of registered eco-schools

### **1.4 Plans for 2010/11**

1. Agree a Schools Carbon Reduction Strategy
2. Increase support for schools to improve their eco-school status
3. Reduce the energy use in our own buildings, through new boilers, insulation, lighting upgrades
4. Encourage buildings to become eco-offices and reduce their carbon footprint through awareness raising and monitoring
5. Install Automated Meter Reading in the majority of buildings
6. We have commissioned Environmental Information Exchange to work with 10 schools to reduce their carbon footprint
7. Continue to encourage the use of the Salix loans available

### **1.5 Risks**

1. Another harsh winter could lead to increased energy use and increased footprint
2. If schools are not able to reduce their carbon emissions, we could fail to reach the target.
3. Difficulties obtaining data quarterly may lead quarterly estimates to be incorrect

Vickie Cossins  
Oxfordshire County Council

## 2.0 Current Status: Cherwell District Council

### Emissions by source for 3<sup>rd</sup> quarter 2009/10

	Electricity	Mains Gas	Vehicle Fuel	Total CO <sub>2</sub> (Tonnes)
Buildings	536	102		638
Fleet Emissions			780	780
Business Millage			118	118
Leisure Centres	981	915		1896
<b>Grand Total</b>				<b>3431</b>

### Summary data for each quarter against baseline

	Tonnes Carbon Dioxide			
	Q1	Q2	Q3	Total
2008/2009	1122.5	1010.2	1235.8	3368.5
2009/2010	1080.5	1075.6	1274.4	3430.5
% Deviance	-3.89%	6.08%	3.03%	1.81%

	Tonnes CO <sub>2</sub>	% Change
Difference Q1- Q3 Total emissions	62.0	1.8%
Difference Buildings and Stationary	-110.3	-14.7%
Difference Fleet Emissions	-28.4	-3.5%
Difference Business Miles	+16.7	+16.5%
Difference Leisure Centres	+184.0	+9.7%

### 2.1 Financial

Service plans for Environmental Services have committed £170K for climate change work for financial year 2010/11. This is an increase of £42K which will allow recruitment of an additional post for climate change work.

### 2.2 Progress to date for financial year (09/10)

1. Recruitment of Part Time Environmental Strategy Officer with days rising from initial 3 to 4 days
2. Approval by Cherwell's Executive Committee of a refocused Action Plan for our Environmental Strategy for a Changing Climate. The Action Plan covers NI 185, 186 and 188 work
3. Our baseline NI 185 data was amended in January 2010 to reflect data irregularities. This resulted in a lower baseline of 5002 tonnes. We are in dialogue with DECC as we are still experiencing problems from an artificially low baseline because all of our leisure centres were closed at some point during the baseline year
4. We have undertaken an options appraisal to examine low carbon design and technology as part of our Thorpe Lane Depot refurbishment
5. Cherwell has completed its Audit Commission self assessment for Use of Natural Resources and are awaiting results from Auditors
6. Overall at quarter three of 2009/10 we are reporting a 1.8% increase in CO<sub>2</sub> emissions

### **2.3 Plans for 2010/11**

1. Recruitment of an additional FT post to concentrate on NI 185 issues only in the first quarter of 2010/11. Once in post early change of behaviour work with commence with a revised Travel Survey, Green Travel Plan and we intend to look into work to deploy a Green Champions network to support behaviour change
2. Since leisure is still our highest emitter we intend to commence a programme of work with our contractors Parkwood to look at energy efficiency issues across our leisure facilities
3. If successfully approved we hope to take part in the Carbon Trust LA Carbon Management Programme
4. Major ICT work is due in the first quarter to reduce power consumption. The current 64 servers are being replaced with 8 new ones and we are rolling out thin client PC's replacing 250 of the standard desktops, reducing power consumption from minimum 60-80W to 4-6W
5. Corporate improvement plan project Use of Natural Resources to review the outcome of the 2009/10 inspection and to improve performance against national indicators. Lead member - head of environmental services and Cllr. George Reynolds

### **2.4 Risks**

Not all leisure centres were open when the baseline figures were calculated; there is significant risk that now the leisure centres are all open, the carbon footprint will have increased in 2009/10. We are in contact with the Department of Energy and Climate Change.

Jo Colwell  
Environmental Strategy Officer  
Cherwell District Council

### **3.0 Current Status: South Oxfordshire District Council**

<b>Tonnes CO<sub>2</sub></b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b><u>Estimated year end</u></b>	<b><u>% change from baseline</u></b>
Civic buildings	<b><u>151</u></b>	<b><u>116</u></b>	<b><u>158</u></b>	<b><u>583</u></b>	<b><u>103%</u></b> <b><u>see note 1</u></b>
Leisure	<b><u>577</u></b>	<b><u>565</u></b>	<b><u>578</u></b>	<b><u>2298</u></b>	<b><u>89%</u></b>
Misc. buildings	<b><u>31</u></b>	<b><u>30</u></b>	<b><u>37</u></b>	<b><u>135</u></b>	<b><u>112%</u></b> <b><u>see note 2</u></b>
Business miles	<b><u>23</u></b>	<b><u>23</u></b>	<b><u>23</u></b>	<b><u>92</u></b>	<b><u>100%</u></b> <b><u>see note 3</u></b>
Fleet including contracts	<b><u>475</u></b>	<b><u>372</u></b>	<b><u>327</u></b>	<b><u>1501</u></b>	<b><u>86%</u></b>
<b>Total</b>	<b><u>1257</u></b>	<b><u>1106</u></b>	<b><u>1123</u></b>	<b><u>4609</u></b>	<b><u>91%</u></b>

1. SODC baseline only included 6 months of data from new Cornerstone Arts Centre. Therefore energy savings in civic buildings have been significant in order to keep emissions approximately constant
2. This category added data for new waste contractors depot in 2009/10 therefore emissions have increased
3. We have not collected emissions from staff and councillor mileage quarterly in 2009/10 pending the introduction of a new automated system in April 2010. Therefore the table above includes 2008/9 data in order that totals may be comparable year on year

### **3.1 Financial**

#### **South Oxfordshire District Council**

Delivery of capital programme for 2009/10 not yet completed due to delay in finalising legal agreement on energy savings share with leisure contractor. We expect to complete these leisure projects in Q1 2020/11. Future funding will be agreed once the 2009/10 projects have been commissioned.

### **3.2 Local Authority Progress**

1. We have achieved significant carbon savings from waste collection due to the introduction of more efficient vehicles in our new waste contract.
2. We have completed a range of projects in the Council offices including lighting work, server virtualisation, voltage optimisation and valve wraps.
3. We have consulted on and are shortly to finalise, an energy saving code of conduct for staff and councillors
4. £80,000 of capital projects in leisure centres have been specified and are due for completion shortly. Automatic metering has been installed in all leisure centres and an extensive programme of staff training implemented.

### **3.3 Project Plans for 2010/11**

1. We have a further programme of projects in leisure centres as set out in our Carbon Management Plan.
2. We will be continuing energy awareness work in the council offices with the appointment of energy champions. Further initiatives with our waste contractor are expected to deliver more savings

### **Risks**

1. A significant building opened partway through the baseline year, therefore some of our emissions are shown to have gone up whereas really the individual sites have made savings
2. Further errors may be uncovered in baseline, therefore although 2009/10 data is more robust, there is some uncertainty in the percentage reductions
3. Anticipated year end data may be an underestimate due to cold weather
4. Ongoing uncertainties in gas consumption data at leisure centres due to the range of units in which gas data can be measured

Heather Saunders  
South Oxfordshire District Council

#### **4.0 Current Status: Vale of White Horse**

**Year to end of Q3 data for Vale of White Horse  
(data for Q1 and Q2 not available)**

	Civic / Office Buildings	Leisure Centres	Other	Business Mileage	Fleet	Total
CO2 kg at Q3 2009/10	415,003 kg	1,880,000 kg	157,942 kg	76500 kg	961,528 kg	3,490,973 kg
Predicted at year end 2009/10	553,337 kg	2,506,655 kg	218,589 kg	102,000 kg	1,282,037 kg	4,662,617 kg
CO2 full year 2008/09 baseline	657,028 kg	2,818,129 kg	349,062 kg	120,668 kg	1,479,069 kg	5,423,956 kg

Figures in red are still subject to ongoing clarification and should be treated with caution.

#### **Financial**

£75,000 capital and £20,000 Revenue committed for the 2010/11 programme. Total predicted savings for 2009/10 were £70,000 for all projects with about £38,000 being savings made by the council, however some projects have been delayed or abandoned with the result that total savings (or in some cases reductions in predicted overspends) resulting from 2009/10 projects will be about £40,000.

Predicted financial savings in 2010/11 for 2010/11 projects is £103,000. Much of this is non cashable efficiency savings arising from the new waste contract.

#### **Local Authority Progress**

The Vale of White Horse is in the second year of implementing its Carbon Management Programme. Most 2009/10 projects were implemented as planned. Individual projects have delivered predicted CO<sub>2</sub> savings but financial savings have been much harder to prove due to variations in prices and the way budgets are constructed.

Projects include:

- Business mileage reduction predicted to be about 20%.
- Server virtualisation, other IT and lighting improvements.
- New air handling unit at Faringdon Leisure Centre.
- Joint energy awareness project with South Oxfordshire.

## **Risk**

A key issue for the Vale in 2008/09 (the LAA2 baseline year) is that although emissions for which the council is solely responsible fell, contractor emissions rose wiping out the modest reduction achieved by the Council. As a result total emissions in 2008/9 rose by 6.4% when compared with 2007/08 (our Carbon Management Plan baseline year).

Indications for 2009/10 based on data to quarter 3 are that emissions will be lower than the 2008/09 LAA2 baseline by 14%. This is a much greater reduction than our long range predictions and what we would expect from our 2009/10 projects. Energy use data from contractors has historically shown a degree of variability which has not been easy to account for. In addition the main pool at the White Horse Tennis and Leisure centre was drained for a month prior to Christmas with a resultant fall in emissions. Analysis of predicted emissions should bear these factors in mind.

## **Project Plans for 2010/11**

1. Completion of server virtualisation at the council offices + further IT rationalisation
2. Re-draught proof windows at council offices.
3. Motorised pool covers at all leisure centres + variable speed drives
4. New waste contract (joint with South) target minimum CO2 reduction of about 30% compared to the current contract. Contract starts in October.
5. Business mileage reduction (follow on from successful project in 09/10)
6. Joint energy awareness projects with South Oxfordshire + energy champions
7. Scope up replacement heating system for council offices.

Mark Saunders  
Vale of White Horse

## **5.0 Current Status: Oxford City**

	<b>Buildings tCO<sub>2</sub></b>	<b>Fleet tCO<sub>2</sub></b>	<b>Total tCO<sub>2</sub></b>
<b>Quarter 1</b>	1486	528.6	2014
<b>Quarter 2</b>	1359	547.4	1906
<b>Quarter 3</b>	1525	525.0	2050
<b>Current footprint for 2009/10</b>			5970

\* These figures are provisional – some lag still on utilities invoicing and fleet data for Q3

## **5.1 Financial**

Oxford City Council: the main source of funding for reducing carbon will come from our Salix fund of £400K that we have in place and we are using to implement a range of carbon reduction measures across the estate. Since Jan 2008, the current Salix figures are as follows: we have committed to or commissioned Salix carbon reduction projects to the value of £286,041 which are estimated to realise carbon dioxide reductions of 976tCO<sub>2</sub>/year and financial savings of £211,679/year.

## **5.2 Local Authority Progress**

We are into the second year of implementation of our five-year Carbon Management Strategy and Implementation Plan. A range of Salix-funded carbon reduction technologies have been installed across the Council's main operational buildings since April 2008 these include:

1. Lighting upgrades, Variable Speed Drives, Voltage Reduction units, Pool Covers, and insulation projects.
2. We have established a robust Carbon management governance structure and are embedding carbon management best practice across the council.
3. We have established an active carbon champions network and implemented comprehensive staff awareness campaigns to realise low cost/no-cost carbon savings
4. Established a robust fleet emissions reduction programme (including a council wide smarter driving training programme)
5. Green travel plan and we are at the early stages of implementation of our comprehensive internal recycling approach.
6. We are improving energy/carbon monitoring approaches through the wide-spread implementation of CRC compliant Automated Meter reading systems. In November 2009 we won two national awards for our progress to date in carbon management – the Carbon Trust innovation awards (public sector category) and the Energy Saving Trust – Fleet Hero awards (smarter driving training).
7. We are on track to meet our latest milestone target of putting measures in place in 2009/10 to reduce CO<sub>2</sub> emissions by 900tCO<sub>2</sub>/year. We have signed up for the 10:10 campaign – which is a stretch on current targets and we have been selected to participate in a CLG pilot Low Carbon Framework programme

## **5.3 Project Plans for 2010/11**

1. We have a target to put measures in place to reduce CO<sub>2</sub> emissions by 800tCO<sub>2</sub>/year in 2010/11 against 2005/6 levels (this covers a wider scope than NI185 as includes council generated waste and is derived from our Carbon Trust LACMP target). The overall key milestone is 2500tCO<sub>2</sub>/year by March 2011 against 2005/6 levels.
2. In 2010/11 there will be a continuation of roll out of carbon reduction projects and carbon reduction initiatives. We are currently investigating the upgrade of Town Hall boilers and zoning systems in this financial year.
3. As part of this project we are looking at the potential use of biomass woodchip boilers for the Town Hall (pre-feasibility studies underway).
4. A comprehensive office rationalisation programme is in train which will bring with it significant carbon saving opportunities and approaches. (eg use of latest energy saving technologies and changes in workstyles such as increased home-working, paperless offices and hot-desking)

Paul Spencer  
Oxford City Council

## **6.0 Current Status: West Oxfordshire District Council**

### **Quarter three data**

	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Total</b>
<b>2008/2009 tonnes CO2</b>	<b>960.4</b>	<b>836.9</b>	<b>962.9</b>	<b>2760.2</b>
<b>2009/2010 tonnes CO2</b>	<b>922.1</b>	<b>862.2</b>	<b>981.3</b>	<b>2765.6</b>
<b>Tonnes CO2 % Deviance</b>	<b>-4.16%</b>	<b>2.94%</b>	<b>1.88%</b>	<b>0.20%</b>

\*these figures are using the baseline known to be inaccurate (see below) due to fleet data inaccuracies

The data here shows that excluding the effect of fleet emissions the overall emissions have dropped by total of 111 tonnes (or 6.6%). The drop is also evident in every quarter, suggesting the savings are both significant and lasting.

	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Total</b>
<b>2008/2009</b>	<b>635.4</b>	<b>519.8</b>	<b>635.0</b>	<b>1790.1</b>
<b>2009/10</b>	<b>560.0</b>	<b>503.7</b>	<b>615.0</b>	<b>1678.7</b>
<b>% Deviance</b>	<b>-13.45%</b>	<b>-3.19%</b>	<b>-3.26%</b>	<b>-6.64%</b>

\*Summary of Data excluding the Fleet emission contributions.

## **6.1 Financial**

We are currently awaiting final budget information for the new financial year, information will be provided at the next quarter when finalised plans and budgets are set.

## **6.2 Local Authority Progress**

In the past year, the Council has started put together basic carbon reduction action plans for Leisure Services, IT and Corporate Buildings. Key pieces of work from this include:

1. The Council has run an energy awareness campaign, using the Green Officers. This included also training officers, managers and Members and using the intranet and internal newsletter.
2. IT has implemented a number of energy saving programmes, including printer rationalisation, reduction of physical servers and desktop virtualisation.
3. Nexus Community, our leisure providers, have put SMART meters in all major leisure centres and are implementing a staff awareness campaign.
4. Using recommendations in Carbon Trust reports, Leisure services and Corporate Buildings have carried out a range of works under reactive maintenance.
5. The Council has had a number of renewable feasibility studies carried out in its main buildings.
6. The Council has procured SMART meters for its four main buildings in order to monitor energy more closely.
7. The Council has set up the Climate Change Management Board so there is a senior officers' group to take forward future energy and fuel saving works.
8. The Council has signed up for the Green Fleets review and is currently awaiting recommendations from this to reduce travel mileage. This will be incorporated in a Green Travel Plan along with the staff green travel survey which has had over 140 respondents.
9. Fleet eco-driver training has been organised for 30 fleet drivers.

### **6.3 Risk**

1. One problem building is affecting the performance of the Council's offices generally – work is ongoing to address this.
2. Inaccurate contractor data has made it impossible to measure fleet emissions this year

### **6.4 Project Plans for 2010/11**

1. A number of projects are currently being considered for the next year. For Leisure these include pool covers, large scale energy saving lighting and sensor system refurbishments, and projects holistically approaching energy efficiency of an entire building. Nexus Community and Leisure Services will continue to work together to roll out projects in key buildings.
2. For Corporate Buildings, projects under consideration include replacement of storage heaters with more energy efficient measures, energy saving lighting and sensors, draught proofing and further insulation measures.
3. The Council is currently considering biomass for one office and solar heating for an outdoor swimming pool.
4. The Council is working with the Carbon Trust to deal with the issues in its problem building.
5. The new Green Travel Plan and Waste and Recycling contract will include key work to reduce fleet emissions with an accompanying action plan.

Debbie Haynes  
West Oxfordshire District Council