Scrutiny Committee



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Report of Head of Corporate Strategy

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To: SCRUTINY COMMITTEE

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Report no. 18/11

Review of progress against the energy efficiency (carbon management) plan 2010/11

Recommendation

That Scrutiny Committee notes progress made towards meeting the council's carbon emissions reduction target of 20 per cent over five years.

Purpose of report

1. The Executive adopted the council's Carbon Management Plan in February 2009. This Plan sets out our goal to reduce the council's carbon dioxide emissions by 20 per cent over a five year period from 2008/9 to 2012/13, and how we intend to achieve it. This Scrutiny report reviews progress on the second year of implementation of the Carbon Management Plan and sets out our plans for future action.

Strategic objectives

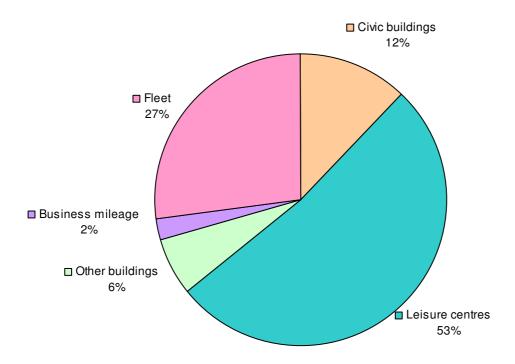
2. This report relates to strategic objective 'Rising to the challenge of climate change' and specifically the corporate priority CC1 - Minimise our impact on the causes of climate change. By reducing expenditure on energy, this work also contributes to providing value for money services.

Baseline

3. The council's baseline emissions in 2007 were 5134 tonnes. This figure does not tie in with the baseline originally published in the Carbon Management Plan as emissions from leisure centres was underreported to the council and were revised subsequent to the publication of the Plan. The chart below shows the breakdown of baseline emissions from different sources.

Baseline CO₂ emissions for 2008/9

Total emissions 5134 tonnes CO₂



2010/11 results

4. Total carbon emissions in 2010/11 were 4689 tonnes, a reduction of nine per cent on the baseline. Reductions for different sectors are shown in the table below.

	2007	2008/9	2009/10	2010/11	Percentage
	baseline	emissions	emissions	emissions	reduction
	emissions	tonnes	tonnes	tonnes	from
	tonnes	CO_2	CO_2	CO_2	baseline
	CO ₂				
Civic buildings	663	657	612	615	7%
Leisure centres	2,697	2,818	2,580	2,559	5%
Other buildings	305	349	227	217	29%
Business	114	121	95	48	58%
mileage					

Fleet	1,355	1,479	1,433	1,250	8%
Total	5,134	5,424	4,944	4689	9%

Weather effects

5. Over the period of our carbon management programme, the weather has become steadily colder year on year. This has affected winter demand for gas, therefore increasing energy use and emissions. We have made nine per cent savings on our emissions despite these weather-related trends. Using national standard weather conditions, we can take away the weather effects and estimate what our savings would have been had the weather remained constant over the period. In this case, our emissions savings would have been an 18 per cent reduction on the baseline.

Projects delivered

LEISURE

6. We delivered two key projects this year as set out in the table below. Swimming pool covers save energy by reducing heat loss from the pool overnight. They also reduce evaporation and substantially cut requirements for pool hall ventilation. Valve wraps are insulating jackets that cover up exposed valves in plant rooms, stopping heat loss to the surrounding air.

Project	Site
pool covers	White Horse Tennis & Leisure Centre, Wantage Leisure
	Centre, Faringdon Leisure Centre
valve wraps	White Horse Tennis & Leisure Centre, Wantage Leisure
	Centre, Faringdon Leisure Centre, Tilsley Park

- 7. As commissioning was just after the year end in April 2011, the energy savings for these projects will show up in our figures for 2011/12. The combined predicted savings from the projects above are 295 tonnes per annum. This is equivalent to a further 5.7 per cent reduction on the baseline. We are negotiating contract variations with our leisure suppliers to ensure that the council recoups a share of the benefits of these energy saving investments, which arise through reduced energy costs.
- 8. We also delivered the following minor projects in 2010/11.

Project	Site	
pool pump inverters	White Horse Tennis & Leisure Centre, learning pool	
pool air handling -	Wantage Leisure Centre	
fan inverters &		
humidity sensor		
LED lighting trial	White Horse Tennis & Leisure Centre, learning pool	

WASTE MANAGEMENT

9. Immediate energy savings were realised when the council's new waste management contract came into operation in October 2010. Efficient waste collection vehicles have contributed to a reduction in fleet emissions of over 12 per cent in the past year.

WANTAGE CIVIC HALL

- 10. An energy audit of Wantage Civic Hall was carried out in January 2011. This identified scope for cost effective energy savings in space heating, lighting and hot water. We have drawn up a programme of work for 2011/12 which includes:
- regular meter readings for better awareness of energy use
- review controls on heating system and ventilation to ensure systems are not running at weekends and overnight if not needed
- insulate various cupboards and doorways where these are leading to cold spots and draughts
- better management of hot water with timers
- occupancy sensors for lighting in toilets, corridors and meeting rooms
- adding multi purpose low energy lighting to main hall to avoid use of theatre lighting, which is expensive to run and not fit for purpose for general meetings.

COUNCIL OFFICES

- 11. We have installed and commissioned server virtualisation equipment. We are at the stage of configuring the system to allow servers to be migrated to the virtual environment. We expect to complete the implementation phase in quarter two 2011/12, with some initial servers moved from physical to virtual.
- 12. Some energy saving projects scheduled for 2010/11 were put on hold pending a review of future office accommodation.

ENERGY AWARENESS

13. We carried out a staff consultation in 2010/11 to create a shared Energy Code of Practice for both councils. The code sets out what we ask staff and councillors to do as part of their day to day activities to help reduce energy use and save money. Management team approved the code and we have placed energy saving advice for staff on the intranet.

BUSINESS MILEAGE

14. We achieved a 43 per cent reduction in business mileage for staff in 2010/11, a reduction of more than 79,000 miles. This exceeded the 5 per cent target.

DATA QUALITY

15. We are monitoring energy use on a quarterly basis. Data quality has improved through a new web based system for collecting travel and mileage data and a new meter reading programme at our public conveniences. We have developed a new shared data collection system, to be implemented in 2011/12, which will include more on site meter readings at staffed buildings.

Projects not on track

LEISURE

16. The leisure programme of work has experienced some delays due to staffing changes, however we have made substantial progress during 2010/11.

Next steps

- 17. The following actions are included in the carbon management work programme for 2011/12:
- Leisure preparation of a restricted tender for energy saving lighting projects across
 the two councils is underway. This includes a number of lighting projects. By tendering
 the work in lots, we will give small businesses the scope to bid for selected elements.
- Waste further emissions reductions are expected as the new waste collection contract completes its first full year of operation. Meetings with the waste contractor are now happening to review progress and develop an environmental plan for 2011/12.
- Energy awareness we will launch the Energy Code of Practice across both councils.
 Energy champions will be recruited for each service team and receive training.
 Champions will encourage their colleagues to reduce the amount of energy being wasted in the offices.
- Mileage reduction we have set a further target for all service teams to reduce business mileage by 5 per cent in 2010/11. We will give heads of service quarterly reports of team and individual mileage and progress against target.
- Core processes In 2010/11 we will review council policies and strategies for energy saving potential. Carbon management will be flagged where appropriate in the strategy and policy review timetable.

Financial implications

18. Our proposed investment in energy projects is set out in the Carbon Management Plan. No additional funding is sought over and above what is set out in the Plan.

Legal implications

19. There are no legal implications arising from this report.

Risks

- 20. The following risks are associated with the delivery of the Carbon Management Plan:
- that the energy projects do not deliver expected savings however this is mitigated by the fact that the projects are based on tried and tested technologies
- the Carbon Management Programme does not allow us to adjust for cold weather conditions, which could lead to higher than expected energy use

 that the waste contractor does not follow up on contractual commitments and expected energy savings are not realised, however we will manage this by developing an environmental plan and holding regular meetings.

Conclusion

21. The council has made progress in reducing carbon emissions with an overall reduction from baseline of nine per cent at the end of 2010/11. We have not met the interim target of a 13 per cent emissions reduction by 2010/11 however the overall programme has contingency built in for slippage so we still expect to achieve our five year target.

Background papers

Vale of White Horse District Council Carbon Management Plan