

CARBON MANAGEMENT PERFORMANCE

Report from: Director of Environment & Culture

Wards affected

County-wide.

Purpose

To introduce the national indicators on climate change and outline the major sources of carbon emission from the council and its contractors in order to inform sustained efforts to reduce emissions over the next decade and beyond.

Financial Implications

1. There is a strong link between ongoing costs and carbon emissions, which mainly relate to use of fuel, electricity and gas. The Council spends significant amounts of money on energy and fuel. In 2007/08 (before the price rises) just under £2.4 million was coded to electricity, gas, oil, solid fuel, LPG and vehicle fuel for direct expenditure in council buildings (including schools) and vehicles. The major contributors were electricity £1.569million, gas £571K, vehicle fuel £114K, heating oil £110K. This is just under 1% of annual budgeted gross expenditure.

Risk Management

2. Increased volatility in energy prices is expected to continue, making planning of budgets more difficult. The long term prediction is that globally energy prices will rise as demand rises and stocks dwindle.
3. The Council leads on the Herefordshire Partnership Local Area Agreement target to cut county carbon emissions by 4.9% over 3 years to March 2011. This means that there is likely to be increasing public interest in the council's management of its own emissions and its performance against its 2005 Nottingham Declaration target of a 20% reduction by 2020. This internal target works out at an average of 1.25% per year for its own emissions: this is lower than the reduction set by leading local authorities and lower than the LAA target for the county of Herefordshire (average 1.6% a year). As the Council prides itself on taking a lead, as agreed by the Joint Management Team, it would be more appropriate for the internal reduction target to be greater than the county target. However not meeting the targets set is also a risk to our reputation.
4. There is increasing international and national pressure to act swiftly to reduce carbon emissions because of the scientific consensus that deep cuts in carbon must be made urgently to avoid irreversible changes to our climate and environment. The Government is committed to achieving a 60% carbon emissions cut by 2050 and in October 2008 stretched this target to 80%.

Considerations

5 National Indicator set: the 3 climate change measures

The council currently has a self-set target, set in 2004/05, of a 20% reduction in carbon emissions by 2020. In the 5 years to March 2009 the council achieved a 10% reduction in the emissions for which it had data over this period (see Appendix 1 for details), so was ahead of schedule on its target.

We are now moving to recording our emissions on the new national indicator, NI185, 'Percentage CO2 reduction from LA operations'. The first return in this format will cover 2008/09 and will be submitted this July. This indicator set does not include landfill gas, which has contributed considerably to our reduction in emissions to date. However it will include considerable emissions that were not included in the 2005 calculations as they were not available at the time.

The new National Indicator set includes 2 other climate change indicators.

- **NI186: county carbon reduction per capita.** Herefordshire has signed up to an overall 13% reduction by April 2011 in emissions from transport, businesses and homes¹. As an indication of the challenge, this means we are looking for a reduction equivalent to a reduction of 1320 kgs per person. Government recognise the challenge of achieving these targets and is looking for strong leadership from local authorities.
See http://www.herefordshire.gov.uk/docs/Herefordshire_Emissions_Graph_2005.pdf for more information on Herefordshire emissions. The data sets for emissions are up to 2 years in arrears at present.
- **NI188: Planning to adapt to climate change.** The council recently completed a Local Climate Impact Profile (LCLIP), which will form the basis for work on this indicator. The LCLIP is posted on the council website at http://www.herefordshire.gov.uk/docs/Local_Climate_Impact_Profile_Herefordshire_-_NI188.pdf More information on scoring on this indicator is provided at Appendix 2.

6 NI185: Percentage CO2 reduction from LA operations

"The public sector is in a key position to lead on efforts to reduce CO2 emissions by setting a behavioural and strategic example to the private sector and the communities they serve. The way in which the local authority delivers its functions can achieve CO2 emissions reductions.

The aim of this indicator is to measure the progress of local authorities in reducing CO2 emissions from the relevant buildings and transport used to deliver their functions and to encourage them to demonstrate leadership on tackling climate change.

¹ 13.1%, of which the local authority influences 4.9%. The rest (8.2%) is to be delivered through national measures

Measurement against this indicator requires each local authority to calculate its CO2 emissions from analysis of the energy and fuel use in their relevant buildings and transport, including where these services have been outsourced.”
(Defra national guidance)

NI185 includes all CO2 emissions from the delivery of local authority functions. This work covers both the powers and duties of the authority. It covers both an authority's own operations and outsourced services. Even where the services are being provided by an external body (eg a private company) they remain the function of the authority.

There is no exhaustive list of the powers and duties of an authority in legislation. However school and business travel are included. Social housing and employee commuting are excluded.
(DEFRA national Guidance)

NI185 requires the following data

- Transport:
- Stationary sources:
 - Buildings
 - Street lighting

Our trial NI185 inventory for 2007/08 shows total emissions of around 22 million kgs of carbon dioxide (8 million transport, stationary sources 14 million) per year. This is nearly double the figure included in the 2004 - 2009 set at Appendix 1. Indicative figures for some activities have not yet been received so total emissions are more likely to go up than down. Our NI185 inventory for 2008/09 (due for submission in late July 2009) will be made up of more reliable figures and so will form a sound basis from which to determine priorities and approaches for reduction and to decide whether or not to change the council's 1.25% target.

These emissions mean that to achieve our current average carbon reduction target of 1.25% per year we need to reduce emissions from our transport by at least 100,000 kgs per year and from our stationary sources by at least 175,000 kgs each year over the next decade and beyond. Achieving this annual 275,000 kgs CO2 target will require long term planning.

The UK is now committed to reducing carbon emission by 80% by 2050. So carbon reduction targets for local authorities are likely to go up rather than down and sustained attention will be needed.

6a Stationary sources (NI185)

Estimates for the current year are as follows:-

- | | |
|--|----------------------------|
| a. Property emissions (council owned/occupied) | 12.4 – 14.5 million kg CO2 |
| b. Contractor property emissions | 3.5 million kg CO2 minimum |
| c. Street lighting emissions | 2 million kg CO2 |

This gives a target reduction of at least 175,000 kgs of CO2 per year to meet our current 1.25% reduction target.

A separate paper on the emissions from Property and answers the questions posed by the Committee in November 2008: Carbon Management - How the Accommodation Strategy can assist in meeting the Carbon Management Targets, is included in this agenda.

Arising from discussion at a previous meeting a further report on Street lighting energy useage is currently programmed to come to committee in June 2009.

The main contracted out functions from stationary sources relate to Environment & Culture (HALO) and Adult Social Care (various). HALO already has an active programme of energy management. HALO have secured Invest to Save funding through developing a business case for energy improvements, which also shows strong quantified carbon reductions. It is hoped that this may become a model for other area of the Council's portfolio. Adult Social Care have block contracts with several care providers and information relating to energy use in their main buildings is being sought.

6b Transport (NI185)

This is a more varied set of emissions, including business mileage, mileage from in-house vehicles and contracted miles for schools and adult social care. Contractor mileage includes substantial distances relating to the work carried out by Amey and FOCSA and miles driven on Home Care contracts with Adult Social Care.

Target annual reductions for transport are 100,000 kgs of carbon dioxide a year to meet our current 1.25% target. This will require active management.

In November 2008 the Committee requested a report setting out, in terms of carbon management, 'how are transport contracts for school/health/ social care/public transport including small fleet operators in the voluntary sector co-ordinated'. Report on this is included in this agenda.

6bi Fleet management

In November 2008 the Committee asked for the following information:

Carbon Management - Further report on Council's Fleet Management/Fleet Manager (No 29 -Nov 08): A more detailed report on the management of the Council's vehicle fleet and possible appointment of Fleet Manager be added to the Committee work programme for consideration at a future meeting.

Work on determining the impact of our own Council owned fleet is continuing. Business miles are already included in the inventory, where they form around 10% of the transport emissions currently identified. The other fleet vehicles, which are far fewer in number, are expected to form a small % of the emissions relating to transport – probably less than 2%.

The fleet review has not yet been submitted to the Energy Saving Trust (EST) as no mileage data has yet been obtained for many of the vehicles. The Sustainability Unit is working with vehicle owners across a large number of council teams and Amey, who service many of the vehicles, to obtain this information. Once this information has been received it will be possible to calculate the carbon emissions from the fleet with greater accuracy.

The data will then be submitted to the EST who will make recommendations. These are likely to include agreeing guidance about the specification of future vehicles bought by the Council: however as the vehicles bought are so varied this may not be simple.

The inventory currently shows the following:-

<u>Fleet Summary</u>		
	<u>No. of Vehicles</u>	<u>Comments</u>
Grey Fleet (cars owned by staff who claim business mileage)	2000+	Possible extra vehicles in Payroll system
Pool Fleet	5	
Team Cars	5	
Vans, Minibuses, 4x4s, mobile libraries	268	Includes school minibuses. Currently excludes gritters.
Lease Scheme	58	

Figures taken from GFR Vehicle Fleet Data Template, Feb 09

6c Other factors

In order to succeed with these ongoing carbon reduction targets, they will need to be considered in service design and when letting major contracts. The Council's Joint Management Team recently resolved that :-

- All major projects and briefs to consultants should require calculation of lifetime carbon costs for options to enable better management of emissions
- Major contractors be required to show a commitment to environmental management as part of the Pre-qualification Questionnaire (PQQ) process and provide the Council with data for our carbon inventory so progress with our reduction target can be checked

Mechanisms for achieving these ends are currently being investigated. Carbon impact was one of the factors evaluated in the last round of capital bids. This process will be refined in future years.

In November 2008 the Committee asked for an oral update on the Waste Collection Contract.

This important 10 year contract will have a major effect on the council's emissions and NI185 performance. Current estimates suggest that this service generates well over 20% of the current inventory of transport emissions. This is because of the necessarily high mileage of the service and because refuse trucks are classed as emitting more than 10 times as much carbon dioxide per kilometer as the average petrol car (DEFRA NI185 factors). It is therefore important that the contract process asks tenderers to estimate the carbon dioxide emissions for their tenders.

7 Planning to adapt to climate change (NI188)

This is a new national indicator. It aims to embed the management of climate risks and opportunities across all the levels of services, plans and estates. It is a process indicator, assessing progress of councils in:-

- Assessing risks and opportunities
- Taking action in priority areas
- Developing an action strategy exhibiting leadership
- Implementing and monitoring action on an ongoing basis

The council is currently on level 0: government is expecting councils to move up by one level a year. A key part of scoring this indicator will be around leadership and innovation in adaptation. Outlines of the requirements for level 0 and level 1 are shown in Appendix 2. Local authorities play an important role as community leaders and demonstrating the ability to give strong leadership and work in partnership is highly rated.

In November 2008 the Committee asked for an update on the 'Local Climate Impact Profile' (National Indicator 188) and the impact of adverse weather on services. (No 20 - Sept 08).

The Council has completed a Local Climate Impact Profile, including a database of extreme weather events running up to summer 2008. The challenge is now to use this information to improve the county's resilience to future climate trends and extreme weather, both for our own services and for the wider county. See Appendix 2 for a summary of progress to date.

As part of the current service planning process services are already required to demonstrate that:

- they are aware of their environmental impacts, both through the provision of their service and as a contributor to corporate impacts, such as energy and paper use
- they are taking steps to control those impacts and to make improvements where possible, either by increasing positive impacts or reducing negative ones.

The Local Climates Impact Profile is now available to managers to inform that process.

RECOMMENDATION

THAT:

- (a) The report be noted, subject to any comments members may wish to make to the Cabinet Member, Environment and Strategic Housing.**
- (b) That the committee support both active efforts to reduce carbon emissions from the council's services and strong leadership in the wider county on climate change and carbon management.**

Attachments

- Appendix 1: Carbon emission April 2004- March 2009
- Appendix 2: More information on NI188, planning to adapt to climate change

Consultees

- Carbon Board members

Background papers

Reports to Environment Scrutiny: September & November 2008