

DERYSHIRE COUNTY COUNCIL

CABINET

11 February 2013

Report of the Strategic Director – Environmental Services

Environmental Sustainability and Carbon Reduction

(Technology and Recycling)

(1) **Purpose of Report** To report on progress made in reducing carbon emissions during 2011/12.

(2) **Information and Analysis** Cabinet agreed a report on 30 March 2010 to establish a corporate Environmental Sustainability Group to co-ordinate environmental activities across the Council and in particular, focus on reducing carbon emissions. Further to this, on 11 November 2011 Cabinet agreed to adopt a target for CO2 reduction of 25% by 2014/15 and to establish a performance management system to monitor progress on environmental sustainability.

During the first year of this target, the County Council has been successful in reducing its emissions by 6.5%. If similar reductions are realised each year, the Council is on track to meet the overall 25% target by 2015.

In 2010/11 the Council emitted 80,604 tonnes of carbon. By March 2011/12 this had been reduced to 75,406 tonnes. The carbon emissions currently measured are from energy use (electricity, gas, oil and solid fuel), fleet and business mileage and street lighting.

Corporate Progress

The Corporate Environmental Sustainability Group (ESG), comprising representatives from each department, continues to co-ordinate the Council's work to reduce carbon emissions. The Environmental Sustainability Scorecard is now well established, updated quarterly and available on the Council's Intranet, Dnet, in the 'How we are doing' section in the Performance Portal¹. The scorecard tracks progress on meeting the carbon reduction target and highlights areas of good performance alongside poor

¹ The data used in the scorecard for each site is the best available to the Carbon and Energy Management Team, this is based on meter readings sent directly to us, Automatic Meter Reading data or invoiced meter readings, other than estimates. If data only covers part of the period the energy monitoring software apportions this to cover the full period. If no data is provided, the original figure used in the baseline year will be used. Due to the differing reporting levels, the four quarterly scorecards throughout the year are indicative of the current progress and the annual scorecard gives a better impression of how we are doing against our targets.

performance where corrective action may be necessary, either by department or emission source. Chief Officers are responsible for delivering the target for carbon reduction within their own area of accountability, reporting progress quarterly directly to the Chief Executive and ensuring that Directors and Managers integrate carbon management into service planning.

Alongside development of the scorecard, the following corporate projects have helped to raise the profile of the carbon reduction targets and promote action among staff and Elected Members.

- The corporate training 'Meeting the Carbon Reduction Challenge' has been re-branded and updated to incorporate the carbon reduction targets. This half day training session raises awareness and understanding among staff about the sustainability agenda and their role in helping the council to respond to climate change. In addition, a bespoke session was delivered to the Leadership Forum to stimulate debate among senior managers and encourage information to be cascaded to all staff.
- An introduction to environmental issues and carbon reduction targets for the County Council is now one element of a Managers Training Course (Advanced Apprenticeship in Management), helping new managers to incorporate carbon reduction into the work of their teams.
- Environmental Mini Guides have been developed to provide useful information for staff on topics such as waste, energy efficiency, water, travel, procurement and commissioning. Links to climate change, current projects, top tips and contacts for further information are included on each guide. These are available on the Dnet in the 'Working for us' section.
- Workforce and Dnet have both been used to promote key climate change messages, including 'top tips' for managers.

Departmental Progress

A summary of progress made by each department in reducing CO2 emissions from electricity, heating and travel is included at Appendix A. Overall, the greatest success has been achieved in reducing employee travel, with the majority of departments meeting their targets. Conversely, cutting electricity use appears to be presenting a big challenge, with a total reduction of 4.5% during 2011/12. It is proposed that a significant focus be placed on reducing electricity use, as this is a major source of carbon emissions across the Council.

The Way Forward

Moving forward there is a need to focus on reducing electricity across the County Council. Progress is already being made in this area, with recent successes including carbon reductions from the implementation of a part-night street lighting scheme and reducing the lighting of County Hall overnight. The installation of solar PV and other energy efficiency projects, including the installation of more efficient lighting in Council buildings, will also contribute to the reduction in electricity consumption. Details of these

schemes will be reported in next year's Annual Report for 2012/13. The Environmental Sustainability Group will continue to develop this work, providing support to officers and Members as appropriate.

(3) **Financial Considerations** With energy bills rising and likely to continue to increase in the future, it is important for the Council to consider the ways it can make savings on these costs. As the Council's carbon emissions have reduced, so too has the Council's energy bill. The overall expenditure for electricity, gas, oil and solid fuel was reduced from approximately £8.8 million in 2010/11 to approximately £8.1 million in 2011/12.

(4) **Environmental Considerations** Achievements in reducing carbon emissions demonstrate the Council's commitment to environmental sustainability.

(5) **Other Considerations** In preparing this report the relevance of the following factors has been considered; legal, prevention of crime and disorder, equality of opportunity; health, human resources, property and transport considerations.

(6) **Background Papers** Report to Cabinet Member – Technology and Recycling 30 July, 2009. Report to Cabinet 30 March 2010. Report to Cabinet 11 November 2011.

(7) **Key Decision** No.

(8) **Officer Recommendation** .

It is recommended that Cabinet note the progress made to meet the corporate carbon reduction target.

Ian Stephenson
Strategic Director – Environmental Services

Departmental Progress

Electricity

Carbon emission reduction targets from electricity use have proven to be the most difficult for departments to achieve. Administrative and operational properties occupied by Adult Care, Environmental Services and Cultural and Community Services have achieved their targets during the first year. Whilst CAYA, including schools, and Corporate Resources have made reductions in their electricity consumption, further savings need to be identified to achieve the target. Electricity consumption within Homes for Older People (HOP) has remained unchanged.

Green – Adult Care; Environmental Services; Cultural and Community Services

Amber – CAYA, including schools; Chief Executives and Corporate Resources

Red –Homes for Older People

What are we doing?

- Adult care has used awareness raising materials, including posters, to help promote energy efficient behaviour in the workplace, which has helped contribute to the significant reductions in their electricity consumption.
- Employee relocations and property disposals through the Accommodation Review have resulted in a reduction of approximately 66 tonnes of CO₂.
- Solar PV has been installed at 3 locations, which has offset the need for electricity from the grid
- Transformation Service has implemented hot aisle containment in the Data Centre. By containing the hot air expelled from the equipment in the racks within an aisle and returning this direct to the air conditioning plant it reduces cooling losses incurred through bypass and recirculation. This should improve the efficiency and effectiveness of the air conditioning within the data centre and means that the inlet temperature to the equipment can be raised. Every degree Celsius rise in the supply air temperature results in a 2% decrease in energy.

Heating

Carbon emissions resulting from heating council buildings, through the use of gas, oil and solid fuel, reduced by 11.5% during 2011/12. Adult Care (including Homes for Older People), CAYA and Environmental Services have met their heating related carbon emission reduction targets, whilst Cultural and Community Services have achieved a 3% reduction, below the annual reduction target. Within Chief Executives and Corporate Resources departments, carbon emissions from gas decreased by 2%, but heating from oil and solid fuel, which has a higher carbon factor than gas, has increased.

Green – Adult Care (including Homes for Older People); CAYA, including schools; and Environmental Services

Amber – Cultural and Community Services

Red – Chief Executives and Corporate Resources

What are we doing?

- The winter of 2011/12 was milder than the baseline year of 2010/11, therefore reducing heating demand.
- Cultural and Community Services improved the efficiency of their heating system in Chesterfield Library through the replacement of an old coal fired boiler with an efficient gas boiler.
- The rationalisation of council properties through the Accommodation Review during 2011/12 has reduced heat related carbon emissions by approximately 111 tonnes of CO₂.

Employee Travel

The Council has been particularly successful in reducing employee travel, with all departments except CAYA meeting their target on this measure. A great deal of work has taken place across departments to encourage staff to consider alternative forms of transport, car sharing and cycling. In addition staff have been encouraged and supported to consider alternative meeting arrangements which reduce the need to travel, e.g. teleconferencing.

What are we doing?

- The Changing the Way Derbyshire Works Smarter Travel Programme has saved £5.435 million. Several initiatives such as the use of pool cars, new communication tools and the introduction of more sustainable vehicles underpin the work to reduce the need for employee travel. A new action plan is being drawn up which will build on the excellent work already done. Departments and employees need to continue to examine how and why they travel at work and what they can do to reduce their mileage.
- Through the DCC Employee Travel Plan 'Miles Better' a number of initiatives have already been introduced. These provide choice for employees in terms of alternative forms of transport to get to and from work.

Fleet Travel

The Council has seen reductions in fleet travel, and has met carbon reduction targets.

What are we doing?

- Cultural and Community Services have regularly reviewed mobile library routes to minimise the distances travelled by the fleet, save fuel and reduce carbon emissions.
- Roll out of a Vehicle Management System (VMS) into Environmental Services Core Fleet (approximately 240 vehicles). Along with significant benefits in monitoring lone driver situations and driving standards, it is anticipated that the introduction of VMS into the fleet would realise savings of £100,000 per annum (based on conservative 10% fuel saving estimate). Based on this figure the introduction of VMS would pay back in approximately 2.5 years. Support has been gained to roll our VMS further throughout the authority's fleet.

Street Lighting

While significant improvements have been made in reducing carbon emissions from street lighting, the targets for this year were not met.

What are we doing?

Throughout this period the County Council assessed the accuracy of information about the street lighting asset across the County and made reductions by improving this information, adjusting bills accordingly and installing some new energy saving technologies. Planning and community consultation on part-night street lighting and switching off some street lights also took place during this period.