



Climate Change Update

SUMMARY

1. The July meeting of Council allocated responsibility for the scrutiny of climate change to this Commission. As part of the discharge of that new responsibility the Chair and Vice Chair requested have requested an update on climate-related activity and initiatives.

RECOMMENDATION

2. To receive and make any appropriate comments on the report.

REASONS FOR RECOMMENDATION

- 3.1 While the report is primarily for information, the purpose of scrutiny is to be value-adding.

SUPPORTING INFORMATION

- 4.1 The full date is set out at Appendix 2.

OTHER OPTIONS CONSIDERED

- 5.1 Not applicable.

This report has been approved by the following officers:

Legal officer Financial officer Human Resources officer Service Director(s) Other(s)	
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IMPLICATIONS

Text below added by the Co-ordination Officer

Financial

- 1.1 As set out in Appendix 2.

Legal

- 2.1 None arising from this report.

Personnel

- 3.1 None arising from this report.

Equalities Impact

- 4.1 None arising from this report.

Health and Safety

- 5.1 In the context of safe working practices and Council liability none directly arise from this report. In terms of policy and lifestyle choices the report relates to the long term habitability of the planet.

Carbon commitment

- 6.1 As set out in Appendix 2.

Value for money

- 7.1 Pay back periods for climate friendly domestic and industrial fittings, equipment and processes can be at odds with capital and revenue budget pressures

Corporate objectives and priorities for change

- 8.1 By 2020 Derby will be a City of Growth, opportunity and innovation, a thriving and attractive city for all, **with an environment that we will sustain and protect for future generations**

Climate Change Update

1 City insulation scheme (ST4)

- 1.1. Following a rigorous tender process during January and February 2010 Dyson Insulations Limited was chosen to work with us on our city-wide private sector housing insulation scheme.
- 1.2. The scheme was set up to make sure that as many private householders insulate their homes as possible – the scheme is generally free to people claiming certain income / disabilities benefits and for those over 70, and £129 for loft insulation and £99 for cavity wall insulation for everyone else.
- 1.3. Since the scheme was launched in April this year, Dyson has had over 400 enquiries and over 200 residents have had work carried out to date.

2 Small Business Grant Scheme - City-wide Partnership Group (CL1)

- 2.1 Door-to-door business visits are still being carried out to talk to businesses and get them to apply for funding. Some businesses that have applied and got approval have recommended the scheme to others and this has helped to boost interest in the scheme.
- 2.2 The Grants Steering Committee, met again for the second time on the 12th of October to decide on a second batch of 11 applications. All but two were accepted for funding. The other two were requested to revise their bids and alter some aspects which did not qualify for funding.
- 2.3 At the time of writing five businesses had completed their improvement works and had been paid their grants.

3 AMR Update and Council emissions/baseline (OE3)

- 3.1 The project to install automatic meter reading plus monitoring and targeting software across the Council estate is now under way with delivery in stages and completion anticipated around March/April 2011.
- 3.2 Schools will be expected to contribute their share of the capital set up cost as well as ongoing operating costs of the AMR system.
- 3.3 Following the extensive manual meter reading and data analysis exercise carried out around the end of the financial year an emission figure for 2009/10 has now been determined.
- 3.4 Energy consumption is derived for non half hourly sites from manual meter readings taken at year start and year end. Where such readings are not obtained at precisely the due day a pro rata adjustment is applied.

- 3.5 The buildings emissions are derived from data collated from around [850] meters across a diverse range of geographically separate sites. Obtaining a meter reading from all these sites on a specific day at year start and year end is not physically possible. Thus the application of a pro rata adjustment to meter readings obtained over a wider range of days is an effective means of obtaining the raw site data that informs the emissions figure in an economic way. Any structural uncertainty due to the manually read data is not considered material and will in any event be eliminated in future by use of AMR.
- 3.6 Data relating to other sources of emissions not directly metered, e.g. transport and waste, was obtained from relevant records.
- 3.7 All sources of data (meters, other records) was collated to derive the 2009/2010 emissions against the baseline set 2008/2009.

	2008/2009 CO2 tonnes	2009/2010 CO2 tonnes	% change on year
Buildings Gas	14,465	12,374	-14%
Buildings Electricity	15,880	14,471	-9%
Street Lighting	6,350	6,482	+2%
Fleet	2,348	2,494	+2%
Grey Fleet	857	788	-8%
Waste	735	735	0%
Total	40,725	37,344	-8%

- 3.8 The reasons for the significant buildings movement are many and varied and can be the result of action by one or more teams across five strategic directorates. Additionally small energy saving action may also be taken by any one of approx 8000 employees. There is presently no formal means of reporting to a central point these actions for the purposes of consolidation (as per financial accounting processes for example).
- 3.9 This ultimately means that a central consolidation of all factors affecting energy consumption is presently not possible with a high degree of certainty.
- 3.10 Nonetheless the following are considered to be the significant influences for the reduction in electricity consumption:
- Effect of a proportion of 8000 employees acting to reduce consumption as a result of awareness campaigns (e.g. switching off lights etc)
 - Leisure centres – the installation of Variable Speed Drives (VSD) to reduce electrical consumption in pool pumping systems
 - Various improvement to lighting e.g. replacement of incandescent lamps with CFL, change from older fluorescent tubes to new more efficient replacements
- 3.11 The following are considered to be the significant influences for the reduction in gas consumption:

- Leisure centres - the installation of Variable Speed Drives (VSD) contributing to reduced heat losses, replacement boiler for domestic hot water (showers)
- Schools - various improvement to building fabric resulting in improved insulation (e.g. window replacement), boiler replacement
- Local action to optimise heating controls.
- Ongoing optimisation of Building Management Systems (BMS) at approx 45 buildings including schools, leisure centres, and council house.

4 Schools' Progress (SE 3)

- 4.1 An Eco Schools Conference, which will be a joint venture with Derbyshire County Council, is in the early stages of planning. It will be in Darley Dale on March 25th 2011.
- 4.2 The climate change box has been used by five schools, with support given to two schools on teaching about climate change and energy conservation. An energy audit was carried out in one of the schools.
- 4.3 The 'Carbon Detectives' Programme, an online tool to involve pupils and staff in reducing carbon emissions, is being promoted and an Officer has attended a training session to support schools who wish to participate.
- 4.4 All of the Nursery Schools have been revisited to see how they are getting on in terms of reducing their energy consumption, following last year's audits. The Nurseries are working hard on this.
- 4.5 Information relevant to schools such as the forthcoming installation of AMR, the availability of free energy display meters and free solar panels from British Gas has been published in the schools' circular, as well as reminders about the availability of the climate change learning resource boxes and energy audits. Schools have been alerted to World Environment Day, Low Carbon day, Water Saving Week and Recycling Week along with links to supporting information.
- 4.6 One of the Council's wind source predictors was erected at Griffie Field Primary School earlier this month. Planning permission has been granted to erect one at Da Vinci School.

5 Hydro Scheme (CL 3)

- 5.1 The order for the turbine and associated equipment was placed with the French company Hydreo in August. Key design information from Hydreo will enable the building design to be finalised and sent out to tender around the end of November with a view to construction starting in February 2011.
- 5.2 The present programme shows completion is expected around the end of July 2011. The latest cost forecast shows the project remains within the £1.685M budget.
- 5.3 Whilst the Council House refurbishment contract is ongoing the majority of the generated power will have to be exported and sold to the grid. The recent change in

the law now permits the exported power to be sold which will greatly assist the project finances especially during the period when the Council house is not able to take most of the generator output for its own use.

6 Warm and well - Working in partnership to provide energy advice and assistance (CL7)

6.1 Phase 3 of the Project started at the beginning of 2010 and will run until the end of the year. It is focusing on people aged 65 and over in 13 of the City's 17 Wards – these Wards are where the residents are either on low incomes, older people, or where there is a high rate of excess winter deaths. Key outputs in the 13 target Wards focus on:

- home visits – a target of 50
- benefit entitlement checks – a target of 30 and
- properties benefiting from energy efficiency measures and/or advice – a target of 250.

6.2 During the first part of Phase 3, which covers the period from 1 January to 30 June 2010, a further 33 people have had a home visit, 37 have had a benefits entitlement check and 208 have received home energy measures and/or advice. During this period there have been 12 group talks, with 318 people attending, 32 drop-in sessions, with 225 people attending, and another 3 acute hospital events, where 105 people attended.

6.3 The Warm and Well Project is well on course, and within budget, to meet all key outputs set for 2010. We are currently working closely with Karen Ray from NHS Derby City and a Public Health trainee, Mandy Clarkson, to produce a report that will be presented to NHS Derby City Commissioners in mid-November. This report is putting the case for funding the Project next year.

7 NI 188 - Embedding carbon management within corporate decision making framework of the Council (ST1)

7.1 The Climate Change Unit is continuing to pursue progress on National Indicator 188: Planning to adapt to Climate Change in order to better prepare Derby and council services for the changes in climate projected by the UK Climate Impacts Program. The council reached level 2 of NI188 in April 2010 and aims to achieve level 3 by April 2011.

7.2 Recent work to achieve level 3 has included:

7.3 Completing work on "Comprehensive Climate Change Risk Assessments". Work is underway to feedback the results to services and implement "Adaptive Actions" based on risk assessments carried out.

7.4 Compiling the "Adaptive Actions" to form part of The Councils "Adaptation Action Plan" which is currently being developed and is key to achieving level 3 of NI 188.

- 7.5 Embedding adaptation into council policy - Strategic Risk Register, Risk Handbook and Report Writing Guide.
- 7.6 Working with local authority partners to hold a series of climate change adaptation events in the autumn.

8 CRC – Developing a Carbon Reduction Strategy for all Council Buildings (ST2)

- 8.1 Derby City Council is a registered mandatory participant in the CRC Energy Scheme as required by CRC Energy Efficiency Scheme Order 2010. The following changes in the Spending Review 2010, page 62, paragraph 2.108 states:

The CRC Energy Efficiency scheme will be simplified to reduce the burden on businesses, with the first allowance sales for 2011-12 emissions now taking place in 2012 rather than 2011. Revenues from allowance sales totalling £1 billion a year by 2014-15 will be used to support the public finances, including spending on the environment, rather than recycled to participants. Further decisions on allowance sales are a matter for the Budget process.

- 8.2 This simplification will have the following financial implications for DCC in that from April 2012 the council will have to fund an additional revenue expense of around £420,000 p.a. for statutory participation in the CRC scheme. Mitigation against this unanticipated rise in revenue expense is only possible by way of reduction of the council's demand for 'allowances' i.e. reduction in carbon emissions. An allowance must be purchased and surrendered for each tonne of CO₂ emitted by the council.

9 10:10 City wide Campaign with Derby Telegraph – City-wide communications programme (CL 2)

- 9.1 The 10:10 city wide communications project involving Derby Telegraph and a number of other local partners is progressing well. The first campaign focusing on the role of householders was kicked off over the summer and is focused around two main components:
- helping to support 10 volunteer households to reduce their carbon footprint by 10% over the next 10 months;
 - an eight page supplement providing advice and information to local people about climate change and carbon reduction which was produced and circulated in July.
- 9.2 The Telegraph's 29th September feature on Education highlighted 3 of the schools that have signed up to 10:10. The feature included information about what some schools in Derby are doing to teach children about climate change and sustainability. There was a full page advertisement detailing what the Climate Change and Energy Management Unit is doing to support schools in their efforts to save energy and money, as well as lots of tips to help schools to make a start on energy saving.
- 9.3 A publicity article on the Small Businesses Grants scheme was published on the 25th of October in the Business Supplement of the Telegraph. The article carried the

story of the first four businesses that were awarded funding through the Small Business Grant Scheme along with a full page advert promoting the grant. This generated a lot of interest from businesses who have been calling for application forms.

- 9.4 As part of the 10:10 campaign a series of activities were organised during the weekend of the 10/10/10 – the global day of action. The weekend was aimed at engaging residents in the 10:10 campaign and getting them involved in practical activities. Working with partners internally and externally, activities included the provision of Home Energy Advice in Westfield, SwapDerby (clothes swap), food skills workshop, Derby bike ride and a recycle and reuse workshop.