

#### **CLIMATE CHANGE COMMISSION 12 November 2007**

Report of Director of Regeneration and Community

## Consultation on the Council's Draft Corporate Climate Change Action Programme

#### **RECOMMENDATION**

1.1 That the Commission comment on the draft Corporate Climate Change Action Programme in order to improve the overall shape and form of the document in helping the Council achieve its carbon reduction target.

#### SUPPORTING INFORMATION

- 2.1 The Council's corporate Climate Change Action Programme builds on the work we have already developed with the Carbon Trust. It is being presented as a draft document for consultation to ensure that all relevant stakeholders from across the Council have the opportunity to comment on the programme and contribute to it.
- 2.2 The pre-amble to the draft programme provides the context to our work in this area and sets this within a clear and robust process to enable us to deliver our 25% carbon reduction target. The process of developing and delivering the programme will be tested in the context of PRINCE2 project development methodology during the consultation period.
- 2.3 Because the programme is mainly inward facing and describes how the Council should meet its own 25% carbon reduction target, the following principal stakeholders have been consulted:
  - All Strategic Directors and Assistant Directors;
  - The Council's Green Team/Climate Change Champions:
  - The Climate Change Commission.
- The consultation process will lead to a more refined and comprehensive document that will be regularly updated as a rolling programme to capture new initiatives as, and when, they arise.
- To help provide a focus to the consultation exercise the Commission is asked to consider the following questions. At this stage we would like your ideas on the overall shape and form of the Programme rather

than detailed comments on individual projects or specific new project ideas.

- a. **Pages 1-3**. What do you think of the pre-amble to the document in terms of providing the context to the challenge ahead?
- b. **Pages 3-7**. What do you think of the processes we are putting in place to help us deliver our 25% carbon reduction target?
- c. **Pages 5-6**. What do you think about the <u>structure</u> of the Action Programme and the project areas we intend to address first e.g. Energy Services, Planning and Regulation, Renewable energy?
- d. Pages 8-14. Are there any obvious omissions to the project areas?
- e. **Page 15**. In addition to scrutinising our progress how else do you think the Commission could help us improve the way we monitor and review our Corporate Climate Change Action Programme?

#### **Timescale**

- 2.6 A revised Action Programme that takes into account the comments made during this consultation period will be presented to the next meeting of the Climate Change Board in early December.
- 2.7 Members of the Climate Change Commission can make their comments at the Commission meeting on 12<sup>th</sup> November or send these to Andy Hills at the contact details below by Friday 16<sup>th</sup> November 2007.

Andy Hills | Team Leader - Environmental Co-ordination | Regeneration and Community Department | Derby City Council, Roman House, Derby, DE1 1XB | Telephone 01332 255569; andy.hills@derby.gov.uk

For more information contact: Andy Hills 01332 255569 e-mail andy.hills@derby.gov.uk

Background papers: Appendix 1 – Implications

**List of appendices:** Appendix 2 – Corporate Climate Change Action Programme – Consultation

Draft 1.

#### **IMPLICATIONS**

#### **Financial**

1. A dedicated budget has been set up to help fund some of the projects that are developed through the programme that have little or no potential for long-term cost savings. The Council also has access to SALIX funding - an independent financial company set up by the Carbon Trust in 2004, to work with the public sector to reduce carbon emissions through investment in energy efficiency measures and technologies. Other funding opportunities including European funding will be investigated as, and when, feasible project ideas arise.

#### Legal

2. None arising from this report.

#### Personnel

3. Putting in place all the necessary projects and initiatives to meet our 25% carbon reduction target will require additional staff resources to work on particular aspects of the programme.

#### **Equalities impact**

4. The many challenging issues brought about by climate change are of significance to all Derby people.

#### **Corporate Objectives**

- **5.** This report has the potential to link with the following Corporate Objectives:
  - Leading Derby towards a better environment
  - Giving you excellent services and value for money

# Derby's Climate Challenge – responding to the call of a changing climate

## Corporate Climate Change Action Programme Consultation draft 1

Foreword - Cllr Chris Williamson - Leader of Derby City Council

Climate change is a very real issue that is threatening the very livelihood of human kind.

Its effects on our general weather patterns are unmistakable. The world's leading climatologists say we are fast approaching a 'tipping point', which could be as little as ten years away.

That is why we need to put in place initiatives to tackle climate change right now.

It is for this reason that I committed the Council to reduce its carbon footprint by at least 25% by 2011. This is a deliberately challenging target to ensure the Council takes the necessary bold steps to make the essential policy and culture changes to turn this aspiration into reality.

In the next few years I want to see a major Council investment programme that will achieve two things. The first is to develop green energy producing facilities and a processing plant for bio-fuels in the city. The second is drive up energy efficiency standards in Council buildings. Much of this investment should be financed by the savings in energy cost that will be generated.

It is also imperative that staff assist in achieving this goal. Doing small things can make a big difference like turning off lights and computers when they are not in use. New working practices will also need to be considered. The Council is already undertaking some good work but we need to do a great deal more.

This document outlines the approach we have put in place to ensure we meet our 25% target. It also contains our first action programme that is essentially a list of key projects that will give us a good start.

This will be reviewed and refreshed on a regular basis to make sure we are heading in the right direction and I commend this document to you.

## Articulating the Vision

To enable us to meet our 25% target we have developed the following vision statement that helps to articulate in three short sentences, how we intend to achieve this very ambitious goal.

Derby City Council will work to make its full contribution to a world in which climate change brought about by human activity is limited to a level that will allow every person to prosper within locally and globally sustainable environments.

## Understanding the science

In order to fully understand the underlying rationale behind this document it is important that a general understanding of the science behind climate change is established.

The atmosphere has a natural supply of "greenhouse gases." They capture heat and keep the surface of the Earth warm enough for us to live on. Without the greenhouse effect, the planet would be too cold to sustain life.

Before the Industrial Revolution, the amount of carbon dioxide (CO<sub>2</sub>) and other greenhouse gases released into the atmosphere was in a rough balance with what could be stored on Earth. Natural emissions of heat-trapping gases matched what could be absorbed in natural sinks. For example, plants take in CO<sub>2</sub> when they grow in spring and summer, and release it back to the atmosphere when they decay and die.

The industrial revolution started to change this natural balance where energy intensive industries started emitting large amounts of greenhouse gases. This process has accelerated with the demands of our present lifestyles where fossil fuels are now burned more and more to run our cars, trucks, factories, planes and power plants, adding to the natural supply of greenhouse gases. The gases—which can stay in the atmosphere for at least fifty years and up to centuries—are building up beyond the Earth's capacity to remove them and, in effect, is creating an extra-thick heat blanket around the Earth. This is resulting in an alarming increase in global average temperatures.

The potential consequences that a changing climate could have on the overall social, economic and environmental stability of the planet are immense. The latest scientific predictions indicate that:

- 40 % of the world's species would face extinction if temperatures rose by 2C.
- 200 million people are at risk of being driven from their homes by flood or drought by 2050.
- 4 billion people could suffer from water shortage if temperatures rise by 2C.

It is therefore imperative that we all embrace this issue at work, home and at play to identify what we can all do to reduce our carbon dependency that is called carbon mitigation. We should also be planning our towns and cities to cope with the various changes that a changing climate will bring in terms of more erratic and intense rainfall and hotter and drier summers. This process is called carbon adaptation.

### Key drivers for action

The Council is not responding to this challenge on its own. All local authorities throughout the UK are preparing their own plans and programmes to tackle this issue in a proactive way. Outlined below are a number of key drivers that have helped to stimulate this response by raising the importance of climate change at both an international, national and local level.

**International level** – the *Kyoto Protocol* is an international agreement setting targets for industrialised countries to cut their greenhouse gas emissions. Industrialised countries have committed to cut their combined emissions to 5% below 1990 levels by 2008 - 2012. Most climate scientists say that the targets set in the Kyoto Protocol are merely scratching the surface of the problem and are recommending emission cuts in the order of 60%.

**National level –** the Government will shortly be ? a *Climate Change Bill* that will strive to deliver a 60% reduction in the UK's carbon emissions on 1990 levels by 2050. This is a very challenging target that more realistically reflects the severity of the issue at large even though some prominent scientist are looking towards an 80% reduction target.

**Local level –** the Council has already signed a declaration outlining how important it considers this issue – the **Derby Declaration on Climate Change**. It has also adopted climate change, as one of its strategic priorities to help give it the clout and profile it deserves:

'We will reduce the level of carbon emissions, raise awareness on climate change and local environmental issues and care for Derby's heritage'.

## Taking the process forward

Derby has all the essential ingredients in place to deliver its 25% carbon reduction target and become an exemplar of best practice in this area. It has:

- the political commitment at the very highest level to champion this issue as one of the Council's main priorities;
- tried and tested project management procedures in place as an excellent rated Local Authority to ensure that progress is made;
- a dedicated team of individuals to co-ordinate this work across the Council;
- access to internal funding to pump prime key carbon reduction projects and programmes.

The approach we have adopted to achieve our 25% carbon reduction target embraces the corporate nature of this work where every department will be tasked to play a full and

active role to reduce its carbon emissions. We will also educate and motivate our employees to play their part both at work and at home in becoming carbon reduction ambassadors.

Even though all UK local authorities are tasked with the same challenge Derby's approach is different reflecting the unique culture of the Council and the key challenges facing the city that we serve. To acknowledge this point the following factors have heavily influenced our approach:

#### Build on existing processes and structures

To help give the Climate Change Programme a good solid base to grow and develop, it needs to be set within a supportive framework. The Derby Declaration on Climate Change provides the strategic policy context for our work in this area along with the scrutiny role played by the Climate Change commissions in reviewing the progress that we make.

#### Need to be clear about what to include in our programme

We need to be clear about how we prioritise our activities in meeting our 25% carbon reduction target by clearly identifying what projects we should support and why. The following hierarchy of carbon support measures will help prioritise our efforts in this area:

- not using energy
- using energy more efficiently
- using energy from renewable sources
- generating the remainder in a less damaging way.

#### Avoid reinventing the wheel

We have undertaken a lot of good work in this area that we need to build on and learn from. The Planning and Environment Commission report in July 2006 on the Council's energy use, and the recent work undertaken through the Carbon Trust's Local Authority Carbon Management Programme are two good examples to help reinforce this point. The Carbon Trust work has enabled us to start working on carbon management opportunities in a structured way.

#### Revisit those hard to improve areas

It is important that we revisit those areas that are especially difficult to address because of either technical or financial reasons. The two reports mentioned in the previous section have both identified issues around the monitoring of energy use within the Council's building stock. It is important that we 'drill down' to address fundamental issues like this before we move on to look at other potential, more exciting opportunities.

#### Develop a balanced programme

It is important to have a programme that combines the more obvious carbon mitigation measures with a number of longer-term interesting projects that have the potential to help capture the imagination of the general public.

#### Keep the programme highly visible

In order to bring about the necessary culture change to win the 'hearts and minds' of our employees it's important that we regularly keep everyone informed of the progress we are making and give employees the opportunity to contribute their ideas.

## Structure of the programme

The Programme will be structured around the following main roles of the Council where it has direct control over its carbon emission or significant influence over the activities of others:

Estate Manager – the Council is a major employer and consumer of energy and other resources. Through better management and design of our existing and new building stock we need to plan for carbon savings to both cut emissions and save money. We also need to consider these issues within the Council's transport fleet and through the waste that we produce along with the different products and services that we procure. The Local Authorities Carbon Management Programme has addressed a number of these areas that we need to build on.

Service provider – all the Council's services from emergency planning to social care have a carbon footprint. We need to develop a better understanding how our major services contribute to climate change and devise appropriate strategies to reduce this impact.

Community Leader – the Council has a pivotal role in leading by example and working alongside other organisations to improve the quality of life of local people. One of the main vehicles to support this culture of partnership working is the Local Strategic Partnership – Derby City Partnership (DCP). A great deal of potential exists for the Council to influence both the Sustainable Community Strategy and the Local Area Agreement in making these documents more climate change aware.

In order to make the level of progress that will be needed to achieve our 25% carbon reduction target the programme will initially focus on the following main areas:

#### Estate Manager

- 1. Energy Services looking at the energy efficiency of the Council's accommodation and other key buildings.
- 2. Transport including the areas of staff travel and the Council's own vehicle fleet.
- 3. Procurement assessing the potential carbon savings that can be made through purchasing goods and services.
- 4. Waste looking at how we manage the various waste streams we produce.

#### Service Provider

5. Planning and regulation - looking at the adaptation role that can be played through the Local Development Framework in preparing the city for the changes that climate change will bring.

#### Community Leader

- 6. DCP work through both the City's Sustainable Community Strategy and the Local Area Agreement in order to both encourage and facilitate a citywide buy in to climate change.
- 7. Renewable energy undertaking research into renewable technologies across the city to build on the work that has already been commissioned on hydro and wind power.

The Council's Climate Change Board has deliberately chosen to focus its efforts on these six discrete topic areas to ensure that we achieve some targeted progress. The agenda of climate change covers a range of other potential topic areas that we could embrace however, in doing so, we run the risk of spreading our efforts too thinly and in doing so achieving very little.

It may be the case that some projects that have the potential to significantly reduce our carbon emissions don't fall within any of these six topic themes. These projects will however still be taken forward as part of our programme.

#### Education and promotion

The whole programme will be supported through a comprehensive education and promotion campaign to help change hearts and minds. We have already undertaken a great deal of work in this area through the Council's Green Team and the 7Cs project but we need to continually challenge ourselves to come up with even more innovative ways to communicate with our employees. It is important that each employee of the Council understands the science behind climate change and is properly informed and motivated to do their bit to help, both at work and at home.

#### Carbon Baseline.

In developing our carbon reduction programme it's essential that we have a good indication of our overall starting point in terms of how much carbon we produce and where this mainly originates. We need to find out the size of the Council's carbon footprint to enable us to get a better feel for the task in hand. This will then enable us to prioritise our efforts so that we focus on those activities that are responsible for the most carbon emissions.

## How the programme works

The programme consists of several tables that include brief information on a variety of key projects that will help the Council achieve its 25% carbon reduction target. The tables are headed up to reflect the three roles that the Council performs - Estate Manager, Service Provider and Community Leader. A fourth table – the Council as an Educator, also brings together some of the main initiatives that will help educate and motivate our employees in this area.

To identify even more opportunities to reduce our carbon footprint we will be organising a series of internal workshops to look at the six main topic areas that will initially form the backbone of our programme. To help give this exercise the necessary clout and commitment it requires each of the topic areas will be 'owned' by the most relevant Assistant Director. Potential project ideas that come out of the workshops will be worked up and included in our programme.

The programme will be developed on an ongoing basis so we can capture any new ideas or initiatives as and when they arise.

In order to decide if any major project proposal that enters the programme receives funding and support, a cost benefit analysis will be carried out. This will scrutinise the potential carbon savings against the amount of financial investment the project requires to ensure that for each pound we invest in our programme we maximise the potential carbon savings that can be made. This will be a new discipline for the Council to adopt and will require a degree of testing and refinement to come up with the best methodology to use.

The various projects included in our programme are divided in the following categories:

- A ongoing projects that are already up and running
- B new project ideas that need to be worked up in more detail
- C projects that have come from our work with the Carbon Trust



Consultation draft 1 / September 2007

## The Council as an estate manager - getting our own house in order

Aim - The Council will look inwards to identify opportunities to reduce its carbon footprint from managing its own estate. This will include the energy needed to heat and power our existing and new building stock; how our employees travel too and from work; how we fuel our vehicle fleet; how we procure the goods and services to enable us deliver our various services and how we mange the waste we produce.

Category / title of project	Brief details	Who will do it?	Timescale	Cost/funding	Carbon implications
A – Carbon baseline	Improve the accuracy and robustness of the Council's carbon baseline position by further developing the work undertaken through the Carbon Trust's Local Authority Carbon Management Programme.	Climate Change Unit	December 07	No initial cost	N/A
B - Energy Services workshop	Arrange a workshop session with key employees to identify the carbon reduction opportunities within the topic area of 'Energy Services'.	Corporate and Adult Services/ Climate Change Unit	October 07	No initial cost	This will depend on the projects identified
B – Carbon baseline of the Council's procurement activities	Design and undertake a suitable research project to better understand and identify the carbon footprint associated with the Council's procurement activities.	Corporate and Adult Services/ Climate Change Unit	November 07	£15,000 for external support	This will be better understood following the exercise.
B - Procurement workshop	Arrange a workshop session with key employees to identify the carbon reduction opportunities that can be made through the procurement of key products and services.	Corporate and Adult Services/Environmental Co-ordination	February 08	No initial cost	This will depend on the projects identified
B – Employee travel Questionnaire	Design, deliver and evaluate a comprehensive questionnaire to better		January 08	£10,000 for external	

	understand the travel behaviour of our employees and raise the profile of the Council's Green Travel Scheme.			support	
B - Transport workshop	Arrange a workshop session with key employees to identify the carbon reduction opportunities that reside within the management of the Council's vehicle fleet and the development of the Council's employees Travel Plan.	Corporate and Adult Services/ Climate Change Unit	November 07	No initial cost	This will depend on the projects identified
B – Reducing the carbon footprint of local schools	Work with Derby and Derbyshire Groundwork Trust to pilot a project in six of the city's schools to engage staff and pupils in taking responsibility for their own carbon emissions.	Climate Change Unit	January 08		
C – Team Bureau electronic billing service	To fully install the Team Bureau services to ensure the accuracy of all electricity and gas bills. This will provide the raw data to monitor and interrogate energy costs and consumption figures.	Corporate and Adult Services	October 07	Annual cost of £25,000 – self financing	
C - Biodiesel trial in Council's fleet	Undertake an extensive trial using 10 council vehicles to test the merits of using 100% biodiesel.	Environmental Services			
C - Powerperfector	Install the powerperfector technology that reduces energy consumption by reducing the electrical voltage to Moorways Leisure Centre and the water treatment works on Pride Park.	Corporate and Adult Services	Nov 07	Salix funding	70 tonnes/year
C – Waste audit	Carry out a detailed survey of the waste generated by each department and set benchmarks based on the tyope of waste e.g. quantity of paper, card, plastic or wood.	Environmental services	December 08	No initial cost	

## The Council as a service provider – planning for a greener city

Aim - The Council is responsible for delivering a wide range of services to the people of Derby. By focusing initially on the role we play in facilitating the physical development of our city we can develop a range of opportunities to better plan for the physical demands that a changing climate will bring.

Category / title of project	Brief details	Who will do it?	Timescale	Cost/funding	Carbon implications
A - Supplementary Planning Document	Develop a supplementary planning document to enforce existing policy commitments and to encourage developers to adopt sustainable design.	Regeneration and Community Services	Draft guidance produced – May 08		
B - Planning workshop	Arrange a workshop session with key employees to identify the carbon reduction and adaptation opportunities that can be developed through the City's Local Development Framework.	Regeneration and Community Services/ Climate Change Unit	November 07	No initial cost	This will depend on the projects identified
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## The Council as a community leader - leading by example and working with others

Aim – The Council through its role as a community leader will engage other key partners to proactively embrace the climate change agenda especially through its work with Derby City Partnership – the City's Local Strategic Partnership. It will especially work with its partners to research and take forward those projects that require a high level of strategic and financial support including the role that renewable technologies might play in the future development of the City.

Category / title of project	Brief details	Who will do it?	Timescale	Cost/funding	Carbon implications
A - Derby 7Cs	Organise a major conference to share the lessons learnt from the 7Cs project with all interested members of DCP. This project, which has been lead by the Council, has been designed to bring about a positive change in employee attitudes towards climate change in seven of the City's largest employers.	Climate Change Unit	Feb/March 08	No additional funding costs	
A - ErBAN	Refocus the work of the ErBAN project – Energy Business Advice Normanton to concentrate on Voluntary and Community Sector groups and organisations in the Normanton area. This project is designed to increase the energy efficiency of small businesses and organisations.	Climate Change Unit	Sept – Dec 07	No additional funding costs	
A - Derby Campaign Against Climate Change Group (DCACCG)	Continue to work closely with the DCACCG to help develop new ideas to incorporate in our programme along with acting as a critical friend.	Climate Change Unit	Ongoing		N/A
A – Wind power	Continue to investigate the merits of wind power throughout the city.				

B - Biocabs	Investigate the merits of developing a high profile project with the local taxi trade to encourage the use of locally produced biodiesel.	Climate Change Unit?		
B - Derby's Sustainable Community Strategy	To ensure that the development of the new Sustainable Community Strategy for Derby embeds the reduction of carbon emissions into the long-term vision for the city.	Regeneration and Community Services/DCP	March 2009	No additional funding costs
B - Derby's Local Area Agreement	Identify LAA target and funding for climate change commitment.	Regeneration and Community Services/DCP		
C - Wood chip boilers	Undertake a feasibility study to investigate the merits of replacing all conventional gas boilers with wood chip boilers for local schools.	Corporate and Adult Services		
C - Hydro power on the Derwent	Develop a business case to construct a 1.3 million Kwh hydro generator on the river Derwent to supply enough electricity to meet the electricity demands of the Council House.	Corporate and Adult Services	?	Approximately £1,000 000
C – Solar water heating in Aged Person Homes	Carry out a feasibility study focusing on two of the city's aged person homes to assess the feasibility of installing solar water heating.	Corporate and Adult Services		

## The Council's role as an educator - winning over hearts and minds

Aim – the Council will ensure that all employees and Elected Members have the necessary information and the personal motivation to make positive, informed decisions about what the individual can contribute to this agenda both at work and at home.

Category / title of project	Brief details	Who will do it?	Timescale	Cost	Carbon implications
A - Climate change behavioural change campaign for employees	Build on the work of the 7Cs project to develop a communications programme aimed at our employees focusing on those practical activities that can be undertaken at work to save energy.	Climate Change Unit	March 08		
A - Climate Change Champions (CCC's)	To develop a clear role for the Council's CC Champions in facilitating energy reduction projects and initiatives aimed at our own employees.	Climate Change Unit	December 07		
B – Dedicated micro site on climate change	Develop a dedicated micro-site to bring together all the outward facing elements of our climate change work				
B - Climate change programme for staff	To develop a training/personal development programme on climate change for Council employees based on the EnviroLearn programme.	Climate Change Unit	March 08		
C - Engaging schools in climate change	Develop a programme of activities to engage schools in reducing their own carbon footprint especially focusing on Head teachers and Governors.				
C – European Energy Certificate 'Display' Programme	Use data from existing sources including the Team Bureau electronic billing service to create large energy performance posters for all the Council's main buildings.	Corporate and Adult Services			

## Monitoring and review.

We will review the progress we make on a regular basis. A six monthly update report on our programme will be prepared for the Council's Climate Change Board. A Highlight Report will also be prepared for each Board meeting. We will also regularly update our micro-site so that local people outside the Council can follow the progress that we make.

