Darlington Climate Change Action Plan – Working Draft

Introduction

Climate change has been termed as 'one of the greatest and difficult challenges we face today'. It is often presented as a global problem of huge complexity, but the solutions are best delivered at the local level, through changing behaviour and consumption choices of individuals, communities, households and business.

In November 2005, the Darlington Partnership, including DBC signed the Darlington Declaration. This demonstrated a commitment to tackling the causes and effects of climate change by every sector in Darlington, across the whole of the Borough.

The Darlington Declaration committed the Partnership to 'prepare a plan, with local communities, to secure maximum benefit for Darlington's community in combating the impact of climate change'. Darlington's first Climate Change Strategy was adopted in December 2006.

The Darlington Climate Change Strategy and Action Plan will co-ordinate Borough wide actions to reduce greenhouse gas emissions and contribute to achieving national targets. The vision that the Darlington Climate Change strategy sets out to achieve is:

'Darlington's community will be protected from Climate Change'

The vision will be met, so far as it is within the power and the ability of the Partnership, through the following objectives:

- Reducing the emissions of greenhouse gases that are causing climate change
- Ensure that we adapt to the level of climate change that is already occurring
- Raising awareness throughout Darlington of the impacts of climate change, the adaptation measures and greenhouse gas reduction measures
- Measuring the effectiveness of our actions and revising and developing further actions to ensure we continue to be effective.

Darlington Borough Council is part of the Tees Valley Climate Change Partnership, which aims to tackle climate change in the most efficient way through sharing resources and efficient sub-regional collaboration on cross boundary issues. The Tees Valley Climate Change strategy sets out the emissions target for the Tees Valley, which is to reduce greenhouse gas emissions by 8.75% below 2000 levels by 2010. As a supporter of the sub-regional partnership, Darlington will contribute to the delivery of this target.

The Darlington Climate Change Strategy and the Tees Valley Climate Change Strategy provide the framework for producing a Climate Change Action Plan for Darlington.

Consultation

Consultation is a vital part of developing an action plan as it enables everyone to get involved and have an input into what should be included and prioritised. Consultation on the Climate Change Action Plan has taken place alongside consultation on the new Sustainable Community Strategy. This has included public consultation events, facilitated workshops, and has been open to all sectors across Darlington.

Over a thousand people have given suggestions and views on how to make Darlington better. All of these views together with the findings from the Enquiry groups have been collated. Climate Change emerged as one of the key issues to be considered as part of the new Sustainable Community Strategy.

Links to other strategies

The aim of the climate change action plan is to bring together, in a co-ordinated way, all of the actions in other strategies, directly or indirectly aimed at tackling climate change. This will enable the actions to be quantified in terms of greenhouse gas emissions and to allow for any gaps to be identified.

Community Strategy – The Community Strategy is currently undergoing review and tackling climate change is emerging as one of the key issues to be included in the new Sustainable Community Strategy.

Local Development Framework – the planning system provides the spatial element of tackling climate change. Within the emerging Core Strategy there are a number of policies linked to climate change, including renewable energy targets, energy efficiency standards of new homes and sustainability of new developments as a whole. In addition to the policies in the Core Strategy, a Design Supplementary Planning Document will set out the sustainable building standards for all new development in the Borough in more detail.

Local Area Agreement – The LAA will be structured around the aims and themes of the Community Strategy. The LAA is the delivery plan for the SCS and forms the strategic framework for monitoring progress.

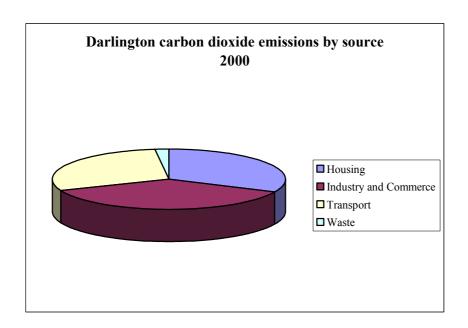
Baseline

A vital part of any strategy or action plan is to have an accurate inventory for a baseline year. The baseline year for this action plan is 2000, which is in line with the national baseline.

To be successful in reducing greenhouse gas emissions, the main sources of emissions need to be established to allow the setting of reduction targets and benchmarking to give meaningful comparison over time. Using the Tees Valley Emissions Inventory and Emissions reporting protocol this baseline has been established. Baseline emissions have been estimated for housing, commercial and industrial and transport sectors using data that is published by DTI, DEFRA and the Environment Agency for all local authorities. Waste data was calculated from data collected by Darlington Borough Council.

An emissions baseline for Darlington (baseline year of 2000)

Sector	Fuel Type	Ktonnes CO2	Total per category	% per category
Housing	Gas Electricity Other (coal & oil)	137.3 80.6 5.6	223.5	31.9
Industrial and Commercial	Gas Electricity Other (coal & oil)	120.2 114.1 23.4	257.7	36.8
Transport (personal)	All	132	132	18.9
Transport (freight)	All	72	72	10.3
Waste	Household Non-Household	11 3	14	2
Total			699.574	



In the year 2000, Darlington emitted approximately 699,574 tonnes of carbon dioxide or equivalent). 336,379 tonnes came from housing, personal transport and household waste and 332,682 from industrial and commercial activities. The average household is responsible for 8.66 tonnes of CO2 per year, with average emissions per capita of 3.74 tonnes of carbon dioxide.

Emissions reduction targets

Darlington has committed to the targets set in the Tees Valley Climate Change strategy of contributing to a 1.25% annual reduction in CO2e, which will achieve a minimum of 8.75% reduction in CO2e over the period 2006-2012. From 2012-2030, the long term minimum target is to reduce CO2e by 27% which is an annual target of 1.5%. Both targets will help Darlington contribute to the national CO2 reduction target of 60% below 1990 levels by 2050.

2000 baseline	699,574
Average annual reduction 2006-2012 (1.25%	8,744
Total reduction required 2006-2012 (8.75%)	61,208

Table 2

Mitigation

Objective – to reduce the emission of gases that are causing climate change

Mitigation aims to avoid the impacts of climate change by addressing the cause. This is achieved by reducing greenhouse gas emissions or by capturing and storing carbon dioxide from the atmosphere in gaseous or solid form.

The energy hierarchy provides a framework for mitigation action.

- i. Use less energy (Be lean)
- ii. Use renewable energy (Be green)
- iii. Supply energy efficiently (Be clean)

As outlined in the strategy there are a number of Government publications that seek to reduce greenhouse gas emissions. More recently the Energy Review, the Climate Change Bill and the UK Climate Change Programme have further strengthened the role of local authorities in tackling climate change

Climate change is presented as a global problem, however, most of the actions causing greenhouse gas emissions take place at the local level. It is the responsibility of every sector of the community and every individual to take action to reduce greenhouse gas emissions. People have become used to high-energy usage lifestyles – energy is used to heat homes, for travel. By reducing demand for energy in homes, businesses and public buildings and using energy which comes from renewable sources, the Government's CO2 reduction target of 60% by 2050 can be met. This requires changing behaviour and consumption choices of individual households, local communities and local businesses.

The most logical and cost effective way to reduce our greenhouse gas emissions is to reduce the amount of energy we consume. The Carbon Trust estimates that energy inefficiency accounts for nearly 1/3 of energy use.

This section will examine the possible actions that could be implemented to achieve the objective of reducing the emission of gases causing climate change.

Adaptation

Objective – ensuring that we adapt to the level of climate change already occurring

Whilst reducing the level of greenhouse gas emissions is important, there is a level of climate change already occurring, which we have little or no influence over. The UKCIP has produced a number of scenarios for the future, which can be used to begin planning on how we can adapt to the changes in climate that have been predicted.

Adaptation aims to address the effects of climate change, such as increased flood or drought risk. It is a response to actual or potential impacts induced by climate change. These impacts may affect human actions directly or they may affect the environment in which we live.

The Darlington Climate Change strategy sets out the predicted changes in climate as detailed in the document 'And the weather today is.....', such as rising temperatures and changing rainfall patterns. Adverse impacts include increased risk of flooding, pressure on drainage systems, habitat and species loss, whilst benefits identified include reduced demand for winter heating and less cold related illness.

To deliver a successful programme of action to adapt to these changes, there needs to be co-ordination with all sectors of the community. The Darlington Declaration commits to working 'with key providers, including health services, businesses and development organisations to assess the impacts of climate change and identify ways in which we can respond'.

The actions outlined in this section fall into four key areas: - Water
Maintaining quality of green spaces
Local development and building design
Public health

Awareness raising and communication

Objective - To raise awareness throughout Darlington of the impacts of climate change, the adaptation measures and greenhouse gas reduction measures.

Carbon Neutral Newcastle commissioned some research to look at public attitudes and action on climate change in the North East. The consultation undertaken as part of the Community Strategy review reflected the findings in that many people believe that climate change is happening, but are unsure as to what is actually causing or how it relates to them or can be influenced by their individual actions.

Education and awareness raising must underpin each of the actions outlined in the action plan. Some of the actions require acceptance by the wider community, others require action by the community.

The key messages are:

- Climate change is occurring
- Everyone in Darlington has a responsibility in taking local action to tackle climate change.

Communication and engagement of communities, businesses and other organisations is a key theme in tackling climate change. There is a need for both behaviour and attitude change. Generating support for policy changes and using growing awareness of climate change can further promote action. The changes, choices and behavioural changes required need to be made attractive by decoupling quality of life from environmental damage. Reducing energy use does not have to lead to poorer living standards and quality of life, but quite the opposite.

Monitoring and Reporting

Objective – measuring the effectiveness of our actions and revising and developing new actions to ensure we continue to be effective.

Darlington will report annually on its greenhouse gas emissions through the Tees Valley Emissions Inventory and Emissions Reporting Protocol to the Tees Valley Climate Change Partnership.

Monitoring the success of the action plan will be (measured against) based on measuring achievements against the implementation of actions outlined in the plan in addition to recording greenhouse gas emissions reduction.

Delivery and Responsibilities

The Darlington Partnership will consider the Darlington Climate Change Strategy and Action Plan in all of its activities and decision-making.

It is the responsibility of all Council departments to ensure that the actions outlined in this action plan are incorporated into service plans where relevant.