

DRAFT

South Derbyshire District Council

Climate Change Strategy

November 2008

Foreword

Introduction

The Derbyshire Partnership Forum has a Climate Change Strategy for the whole Derbyshire Area. South Derbyshire District Council endorse that strategy and have produced this document in order to plan delivery of its contribution to the collective effort which must take place across the County, the nation and internationally.

This strategy sets out the environmental evidence and the legislative and policy imperatives for action. It goes on to define the nature and root of current emissions made by the Council and the Community of South Derbyshire.

It sets out the types of action that can be taken and are thought to represent general best practice.

There will also be a specific Carbon Management Plan. This will be a stand-alone document that will be updated and revised annually to drive progress. The Carbon Management Plan will have two sections one for the Council's direct operations and one for Community emissions.

Finally there will be an Adaptation Action Plan which will schedule improvements in service delivery which represent milestones in adapting to changes in climate and measures progress against the associated National Indicator 188.

1 ...A time to Act...

There is now an overwhelming body of scientific evidence highlighting the serious and urgent nature of climate change. The fourth report from the Intergovernmental Panel on Climate Change¹ (IPCC) published in November 2007 shows conclusively that the debate over climate science has moved from whether or not it is happening to what action we now need to take.

Concentrations of atmospheric carbon dioxide have increased from pre-industrial concentrations of 280 parts per million (ppm)² to 387 ppm³ in 2008 which is far higher than the natural range of 180-300ppm of CO₂ over at least the last 650,000 years, as determined from ice cores.

Global temperatures have risen by 0.74°C over the past century and 0.4°C of this warming has occurred since the 1970s, although this warming is unevenly distributed across the world being more pronounced at the polar and high altitude regions and less so in the inter-tropical areas of the earth. Average UK central England temperatures are now higher than at any time since records began in 1659. Eleven of the last 12 years have been amongst the 12 warmest since global records began in 1850.

Unfortunately for the British this doesn't necessarily mean sunny or enjoyable weather. The rising temperatures induce huge changes in weather patterns and inject greater amounts of energy into weather systems. This is just as likely to mean stronger and more frequent storms with more regular flooding and higher levels of wind.

The Stern Review has stated that without intervention, greenhouse gas levels will reach a level of at least 550ppm CO₂e by 2050 committing the world to at least a 2°C rise in temperature.

Such temperatures would bring about severe global consequences for sensitive ecosystems, melting ice-caps, rising sea levels, rainfall intensities and frequencies, intensities of storms and flooding and frequency of heatwaves. These changes in the natural environment are likely to be irreversible and could bring about significant changes to human societies.

¹ Working Group II, Fourth Assessment Report, Climate Change Impacts, Adaptation and Vulnerability, Intergovernmental Panel on Climate Change, United Nations Environment Programme and World Meteorological Organisation, February 2007 <http://www.ipcc-wg2.org/>

² Ocean Acidification due to increasing atmospheric carbon dioxide, p 13, Policy Document 12/05, The Royal Society, June 2005. <http://royalsociety.org/displaypagedoc.asp?id=13314>

³ Carbon Dioxide levels in the atmosphere are around 387 ppm. Including other greenhouse gases gives a carbon dioxide equivalent total of around 430ppm. <http://www.esrl.noaa.gov/gmd/ccgg/trends/index.html#global>

2. Legislative and Policy Imperatives

The Government's Climate Change Bill, due for enactment in November 2008. Parliament is expected to pass the first piece of legislation of its kind in the world, through which the UK will be committed to legally binding carbon reduction targets of 80% by 2050.

The Government has created a set of 198 National Indicators (NIs) and of these three (NI's 185, 186 and 188) are directly connected to climate change and two others (NI's 187 and 194) will be delivered by the same kind of action programmes. Consequently positive action in the right area will provide gains on multiple indicators and reflect very positively on the LAA and associated partnership.

The Derbyshire Partnership Forum has selected NI 186 (Reduction in CO₂ emissions per capita) and NI 188 (Adapting in readiness for Climate Change) for inclusion in its 35 Priorities for the area.

South Derbyshire has set Combating Climate Change as a priority in its Corporate Plan for 2008 –2011 and takes a lead role on the Nottinghamshire and Derbyshire Local Authority Energy Partnership. Hence South Derbyshire has offered strong leadership to date and is in a good position to turn planning into concrete achievement and take up a position as a national exemplar to district authorities.

3.0 Specific Targets

Through the Derbyshire LAA the following targets have been agreed with the Government Office East Midlands.

3.1 Reducing CO₂ Emissions

For the South Derbyshire Community the target is expected to be confirmed as a 9.06% reduction in community wide CO₂ emissions per capita by 2011. This leads to approximately 3% per year but the target was imposed sometime into the first year and even as this draft is written budgets and service plans are in gestation for 2009/10 and the chance to make changes within this three year period is slipping past. Hence the progress in the years 2009/10 and 2010/11 will have to recover from a slow start and deliver more than the 3%. This is a significant challenge. However the Government and its other agencies are charged with helping deliver elements of this and should contribute through national campaigns etc.

3.2 Adaptation

A framework for judging how prepared Local Authorities and their partners are has been published as part of the definition of NI 188. Central Government want to see progress against this framework .

The framework is divided into 5 bands with a corresponding score ranging between zero and 4 with zero being the most basic level of readiness and 4 being considered best identified practice in terms of preparedness according to current thinking.

In negotiation with Government Office for the East Midlands a target has been set to reach level three as defined by the NI 188 definition by March 2011.

The detailed standard can be viewed at appendix N. But the major landmarks on the way include;

Level 0 – Making a start: allocating responsibility for action, reviewing existing information and identifying a process to make progress against framework.

Level 1 – Public commitment, outline risk assessment made, managers and partners aware of vulnerability to climate change, next steps planned.

Level 2 – Comprehensive risk assessment, priority risks and effective responses identified, incorporation of these into plans and action on key priorities begun.

Level 3 –Appreciation of Climate impact and risks embedded into all Council and LSP decision making, action taking place on all priority issues.

Level 4 – Comprehensive adaptation action plan and progress monitoring in place across the whole of Council and LSP activities.

4. Baseline footprints

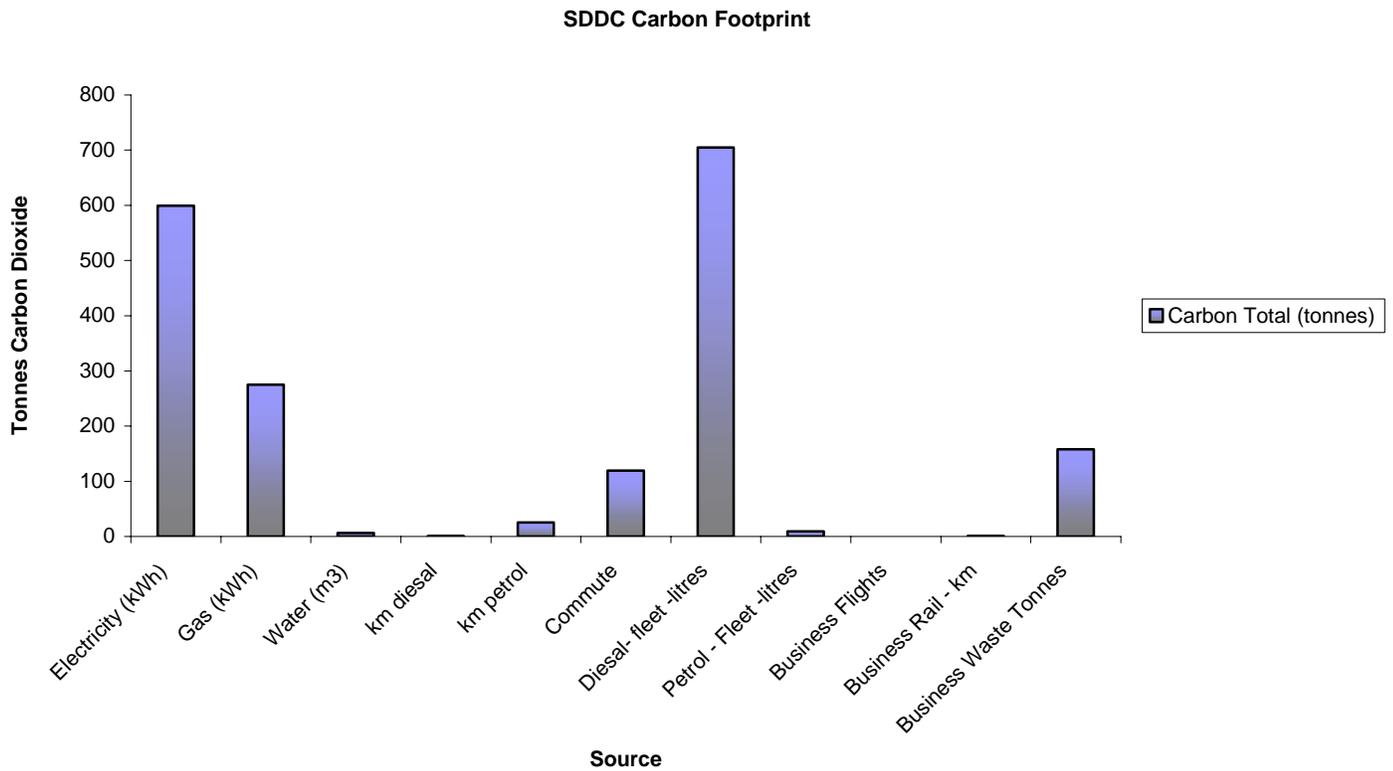
4.1 The Council

The Council's direct operations lead to regular emissions and these have been quantified using the Carbon trusts conversion factors and results are available for two years, 2006/7 and 2007/8.

The Council's total Carbon Footprint from its direct activities in 2007/8 was 1246 tonnes.

In order to see what activities are the most significant contributors to this, Table 1, below, shows the distribution of consumption across different Council activities and the relative scale of emissions arising in 2007/8.

Table 1



Tables Two and Three illustrate the relative consumption of gas and electricity, respectively, across the three main council sites. (Taken from the 2006/7 Environmental Statement)

Table Two

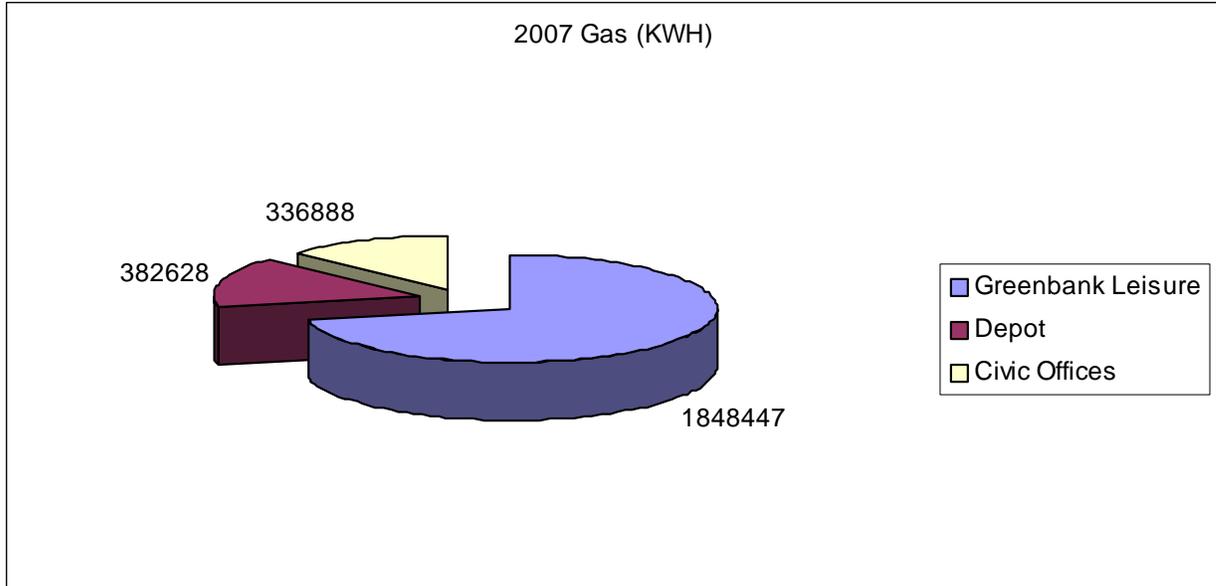
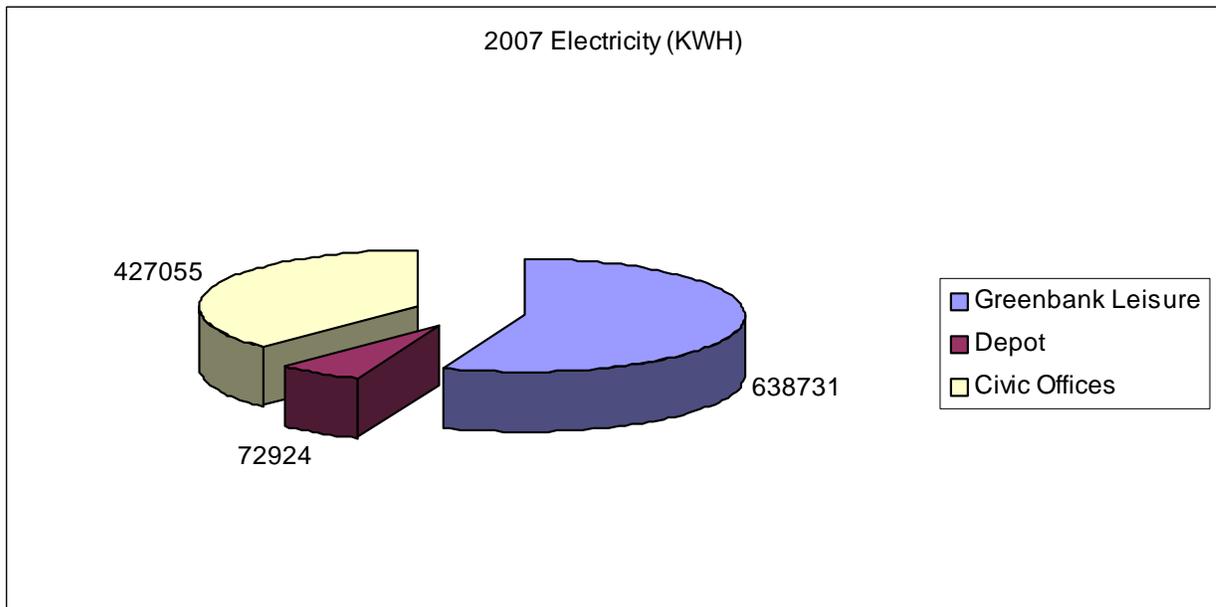


Table Three



Other factors

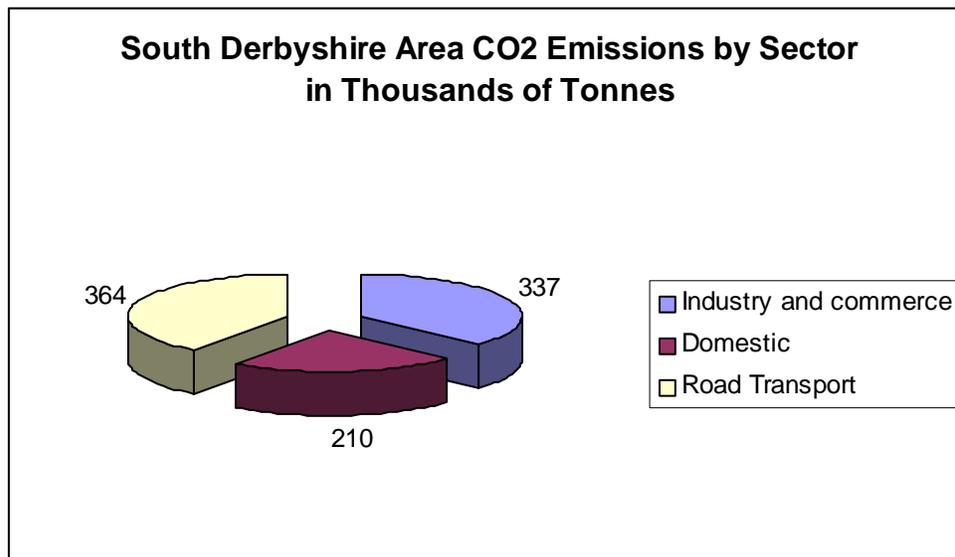
Household waste and recycling. Assessment of the impact of increased recycling and composting household waste has a positive impact on carbon emissions and this has

recently been enumerated as part of the market testing exercise. This will have to be updated once the exercise is completed but the in house information may be taken as indicative for the time being and this showed that the current recycling regime would be likely to save in the region of 10,000 tonnes of carbon dioxide equivalent per year compared with simply landfilling all the waste. It is noteworthy that to add plastic bottles to the kerbside collections would save in the region of 2,830 tonnes more. This would be more than double the carbon footprint of the whole of the Council's direct operations and offers a helpful reminder of the benefit of the Councils progressive recycling regime.

4.2 Community Activity

Defra publish the District wide CO2 emission data based on consumption information from the Utility Companies and traffic surveys for transport. The information is retrospective and Defra have proposed continuing to publishing it two years after the event.

The most recent information available is 2005 (2006 info is imminent) and shows the following for South Derbyshire. The chart below illustrates the current consumption pattern across the three key activities that characterize our activity.



Ultimately changes in these overview figures produced by Defra will be the measure of success or failure. This could mean that even vigorous activity resulting in proven reductions in Co2 may be offset by increased consumption elsewhere in the community and fail to register as success. This illustrates key importance of a mass communication campaign and coordinated cross sector and cross society action.

5. Policy Measures to Reduce Emissions

Ways to cut carbon, “in principle”. *This section will be populated with the sort of work practices and lifestyle choices that will cut carbon and should be encouraged.*

Examples will include

Energy efficiency
Residential
Commercial
New build

Renewable Generation

Local Generation and Distribution

Influencing the supply chain

Waste Minimisation

Higher Recycling Levels

Transport

Industry

Agriculture

etc

Annex 1 SDDC Carbon Management Plan

Annex 2 SD Community Carbon Reduction Plan

Annex 3 SDDC Adaptation Plan

South Derbyshire District Council

Carbon Reduction Plan 2008

Initiative	Relevant Indicator	Annual Co2 Saving in Tonnes, commencing.....				
		2009	2010	2011	2020	2050
Replaced boilers in Civic Buildings	185 & 186	0.3				
Centralised printers	185 & 186	5				
Infra red light switches	185 & 186	5				
Pipe lagging	185 & 186	5				
Water savers	185 & 186	1.5				
Powerdown plugs	185 & 186	3.2				
LCD screens for CRT's	185 & 186	3.2				
Reduced Cooling in Server room	185 & 186	19				
Comprehensive recycling system	185 & 186	50				
	Total	97.2				
% reduction in Council's footprint		7%				
% of South Derbyshire Community footprint		0.01 %				
Gas efficiency at Green Bank	185 & 186	158				
New BREAM std depot	185 & 186	100				
Greener car allowances	185 & 186	-	-	10% cut	50% cut	
Revamp or replace Civic Buildings	185 & 186	-	-	-	50% cut	
Increase recycling rates	186					
Offer Cash incentives to forego compost collection in rural parishes	185 & 186					
Waste and Cleansing Contractor to Cut emissions by 10% over 7 years.	185 & 186	-	20	20	65	
Voltage modulation at Green Bank	185 & 186	12				
Influence suppliers to cut CO2	185 & 186	?				
Green Tariff Electricity	?	752 *				
Total (not inc green tariff)		270				
% age Reduction in Council's footprint		21%				
% age of South Derbyshire Community footprint		0.03%				

South Derbyshire Community

Carbon Reduction Plan 2008

Initiative	Relavent Indicator	Annual Co2 Saving in Tonnes, commencing...				
		2009	2010	2011	2020	2050
Council						
Carbon Village Footprint Overseal	187 &186	455				
Rural Landlord Scheme	187 &186	62				
Advice and Signposting	186	2000				
Home Repair Plus	187 &186	120				
Warm Front Grants (affordable warmth)	187 &186	233				
Independent Home Insulation Scheme	187 &186	530				
British Gas scheme	187 &186	34				
Renewable Loans	187 &186	1.6				
Tighter building regulations	186	?				
Promote renewable generation via	186	?				
Planning policies	186	?				
Economic development policies	186	?				
Promote Combined Heat and Power	186	?				
	Total	3,435				
% of South Derbyshire Community footprint		0.4%				
Other LSP Partners						
Define own carbon footprint	186	?				
Community buildings energy reviews	186	?				
Target CO2 reductions	186	?				
Staff campaigns	186	?				
Waste minimization	186	?				
Higher recycling	186	?				
More ideas needed						

South Derbyshire Climate Change Adaptation Plan

Level	Criteria as set out in NI 188	Council Response/ Planned Response	Target Date
Zero	Identify Lead Officer on Climate Adaptation	Delegated to Head of Environmental Services	Complete
	Identify relevant existing risk registers and action plans.	To identify relevant existing risk registers and action plans.	Feb 2009
	Develop a process to plan and drive progress to wards reaching the higher levels of NI188.	This action plan sets out the Council's process for delivery against NI 188.	Complete
One	The authority and partners have made a commitment to manage Climate risks.	The Authority and LSP will adopt the South Derbyshire Climate Change Strategy and this action plan.	April 2009
	A risk based assessment of climate and weather vulnerabilities has been made.	A local climate Impacts profile is ongoing and will be completed.	April 2009
	Major areas of vulnerability addressed and less significant vulnerabilities understood and way forward planned for these.	Directors and Heads of Service facing significant impacts understand the issues and can show evidence of action already taken. A timetable for addressing outstanding vulnerabilities developed.	April 2009
	These areas of vulnerability and opportunity are communicated to managers and external other partners.	Presentation to be made at CIG to ensure managers fully aware. Working with Derbyshire County Council to produce a local climate Impacts profile across the county and one for South Derbyshire. LAEP has organised best Practice Workshop on adapting for Climate change with UKCIP 26.06.08.	April 2009
Two	Comprehensive risk assessment produced including key Priorities		
	To be continued.....		

