INTRODUCTION

What is Climate Change?

The environmental, social and economic threat posed by climate change is well recorded, and has been subject of ever increasing media coverage especially in the last 2-3 years. Moreover the need to tackle dangerous climate change has risen sharply up the national and international political agenda. In the words of David King, UK Government's Chief Scientist, 2003, “climate change is the most severe problem we are facing today, more serious even than the threat of terrorism”.

Climate change is caused primarily by a basket of 6 gases, produced by human activity, which contribute to the greenhouse effect:

Greenhouse gas	Main source
Carbon dioxide (85% of total effect)	Energy generation and use, transport
Nitrous oxides	Transport, industry
Methane	Agriculture, waste management
Hydrofluorocarbons	Refrigeration
Perfluorocarbons	Fire fighting
Sulphur hexafluoride	Various industrial uses

Each greenhouse gas has a different capacity to cause global warming dependant on its nature. So for example the global warming potential (GWP) of methane has 21 times the warming effect of carbon dioxide, and nitrous oxides 310.

There remain some who consider that the changes to the climate currently being experienced and predicted for the future are part of a natural cycle of global warming and cooling. Nevertheless the vast majority of scientific opinion now agrees that changes in global temperatures are largely attributable to human activity, and will have dangerous impacts on human populations. Moreover there are some who believe that climate change would already be much more serious were it not for “global dimming” – the effect whereby pollution and dust in the atmosphere caused in part by human activity is reducing solar radiation reaching the earth and holding back the rate of global warming.

Responses to climate change fall into two categories:

Mitigation - reducing the emission of greenhouse gases to limit the scale and severity of climate change (although some level of impact is now inevitable, and changes are widely considered to be already happening).

Adaptation - taking action now to minimise the harmful consequences of whatever climate change occurs. Examples include planning new development away from areas of flood risk, design of buildings resilient to flooding/storms, emergency plans for disease epidemics, and construction of water storage and distributions schemes.

Put more simply, mitigation is about tackling the causes of climate change; adaptation is about responding to its effects. Most attention to date has been focused on mitigation.

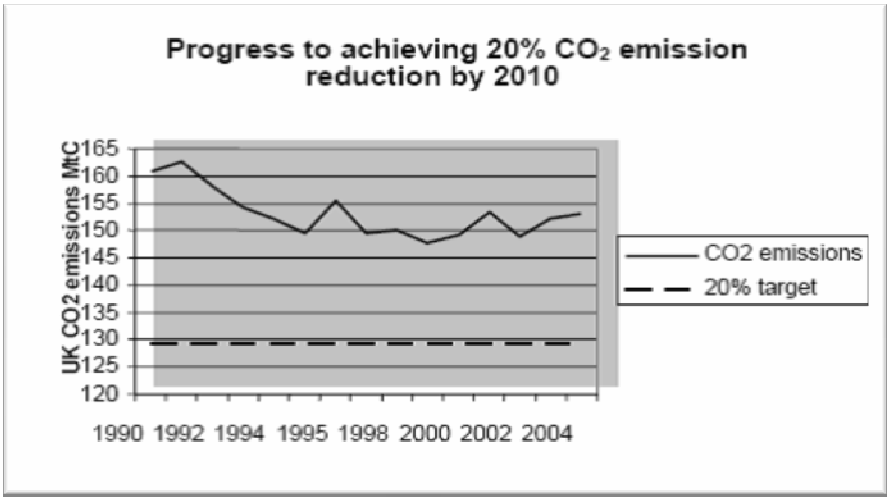
International and National Responses to Climate Change

In 2005, following years of discussions, the Kyoto Protocol was legally ratified by 163 countries. This provides a framework for a global response to climate change, and sets enforceable targets for signatory countries to reduce their emissions of the 6 greenhouse gases listed above. The UK target is to reduce the emissions of these gases by 12.5%, based on 1990 levels, over the period of 2008 and 2012.

In the UK, the Government, until recently, has adopted a more exacting domestic target for carbon dioxide. This was to:

- Reduce CO_2 emissions by 20% from 1990 levels by 2010
- Reduce emissions by 60% from the same baseline by 205

However, although there was early progress towards both domestic and Kyoto targets, recently emissions have been rising again rather than falling as illustrated on the following diagram:



As a consequence, in its revised UK Climate Change Programme published in March 2006, the Government reduced its more exacting 2010 target from 20% to 15-18%. The most recent figure for 2004 is 5% below the 1990 baseline (source: www.defra.gov.uk)

Government has made clear (most recently in the UK Climate Change Programme 2006 which sets the framework for action in the UK on climate change) that to achieve this target, public agencies such as local authorities must not only play their part in delivering reductions in carbon emissions but also provide community leadership and encourage others to do the same. This has been re-emphasised by many other organisations, including the Local Government Association. Indeed the Government has recently indicated that from 2008 Comprehensive Performance Assessments will also consider the extent to which local authorities are playing their part in tackling climate change.

The new Climate Change and Sustainable Energy Act 2006 will make it easier for householders who produce electricity at home from microgeneration technologies to sell unused power back to their supplier and will require the Secretary of State for Defra to report to Parliament each year on the UK's greenhouse gas emissions and progress on the steps taken to reduce them. As a signal of the Government commitment to change environmentally sustainable behaviour, they have set themselves two new targets. Firstly to make the Government office estate carbon neutral by 2012 and secondly to reduce Government's total emissions by 30% from buildings by 2020. In addition, the results of the Stern review published in autumn 2006 produced an economic argument for early intervention to prevent the worst aspects of climate change. This was closely followed by government consultation documents on "Building a Greener Future'' which set a target of all new homes to be zero carbon by 2016. In March 2007, the Government published a Climate Change Bill, which seeks to create a pathway to a 60% reduction in carbon dioxide emissions by 2050, with real progress by 2020.

South Kesteven District Council is committed to providing important local leadership in relation to climate change. A key part of that role is to lead by example and the Carbon Plan sets out how the Council will reduce its carbon emissions over the next five years.

The climate change impact of an organisation such as the Council relate to two main areas:

a. **Direct impact**
   Through the use of its buildings, transport, the goods and services it procures, and its own management of its own waste.

b. **Indirect impacts**
   Through its influence on the actions of the wider community and in its influence on land use planning, education and raising awareness on environmental issues.

Although the indirect impact of the Council's influence is important, the Council's Carbon Management Plan relates exclusively to the direct impact the Authority has as an organisation. These impacts come mainly from the following activities:

Council activity	**Main greenhouse gas emissions**
Energy use in buildings (space heating and the use of electricity)	Carbon dioxide
Transport (fleet vehicles, staff business mileage and commuting)	Carbon dioxide, Nitrous oxides
Waste from Council operations	Methane, Carbon dioxide
Procurement of goods and services	Carbon dioxide, Nitrous oxides, Methane

In practice it is common to refer to a plan which seeks to reduce emissions of all these gases as a **Carbon Plan**, even though nitrous oxides (NOx) do not contain carbon. This is because carbon dioxide represents the main cause of climate change, and because measures to reduce the emission of NOx from transport are likely also to reduce carbon dioxide emissions.

Detailed in the plan are the actions that will contribute to that target. They address the acknowledged areas of opportunity like energy efficiency investment in building stock; reducing the waste we send to landfill; how we manage our vehicle fleet; and staff travel to work. In addition we are already putting in place the policy building blocks to embed carbon management in Council culture and practice through our Environmental Policy and development of clearer policies in procurement and management of our own waste. We are also sure that we will find other partners willing to add their expertise and efforts including various energy related groups.

We are partners in the Lincolnshire Environment and Climate Change Partnership (LECCAP) which includes the County and District Councils within Lincolnshire, all working together to assist each other in plans and policies to improve energy efficiency in Lincolnshire.

Our plan includes a framework of policies, taking the obvious opportunities and acknowledging the other areas that need tackling but will need more discussion and development. We believe that this provides us with a balanced plan that will change during its 5 year life as we understand and evolve our approach.

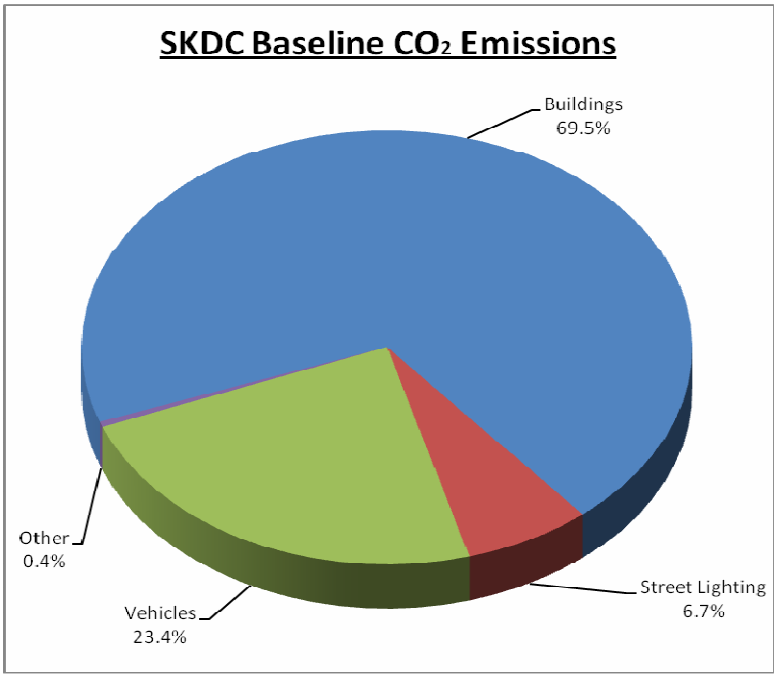
BASELINE - SOUTH KESTEVN DISTRICT COUNCIL'S CARBON FOOTPRINT

Introduction

In developing targets and a programme for reducing carbon emissions, it is essential first to understand the level and causes of the Authority's current emissions.
The process of measuring carbon emissions and using this data to inform management decisions is called **carbon accounting**. However, as will be illustrated later, it is important not just to understand carbon emissions but also other trends such as the use and cost of energy.

In the following analysis, 2008/09 has been used as the base year for carbon emissions. It is estimated that in that year the Council was responsible for a total of 8,660 tonnes of carbon emissions, excluding procurement. The contribution made by the different activities

Activity	CO_2 Emissions (tonnes/yr)	%	% of Total
Buildings (heating, lighting & appliances)	**6,035**	**100**	**69.49**
• Offices	1,299	21.5	
• Leisure centres & sports fields	4,529	75.0	
• Car Parks	207	3.4	
Street Lighting & CCTV	**586**	**100**	**6.75**
• Street lighting & Cameras	586	100	
Fleet	**2,036**	**100**	**23.44**
• Lorries / Vans	1,650	81.0	
• Pool Cars	46	2.3	
• Business Travel	141	6.9	
• Veolia Grounds Contractor	89	4.4	
• William Freer Gas Contractor	85	4.2	
• Performing Arts	25	1.2	
Waste	**22**	**100**	**0.26**
Water	**6**	**100**	**0.07**
Total	**8,685**	**100**	**100**



Following advice from DEFRA the carbon emissions from procurement have been excluded from the above calculations table due to the extreme difficult in quantifying them.
Excluded emissions include:

- The manufacture of goods and materials used by the Council, including major construction projects such as buildings.
- The transportation of these goods and materials to Lincolnshire.
- The activities of external service providers and contractors, including their transport and buildings.
- Electricity used routinely in buildings for lighting, air conditioning etc.

ENERGY USE IN OUR BUILDINGS

Energy use in buildings includes the following:

- Space and water heating (by gas or electricity)
- Other gas appliances such as cookers in kitchens
- Electricity used routinely in buildings for lighting, air conditioning etc

Energy consumption shows that 90% of the electricity comes from 10 of the 34 monitored buildings. 95% of supplied gas is used by 7 of the 34 properties owned by the Council.
The following table lists these properties with the proportion of energy used by each location.

List of significant properties with proportion of total energy

Property		Electricity		Gas	
		KWh	%	KWh	%
Grantham	Leisure Centre	1,700,500	23.7%	5,066,294	37.9%
Bourne	Leisure Centre	850,601	11.9%	2,216,458	16.6%
Stamford	Leisure Centre	399,892	5.6%	2,131,986	16.0%
Deepings	Leisure Centre	974,177	13.6%	2,000,360	15.0%
Grantham	Main Offices	692,783	9.7%	691,301	5.2%
Grantham	Arts centre	145,739	2.0%	311,772	2.3%
Stamford	Arts centre	196,856	2.7%	275,977	2.1%
SKDC	Highway Street Lighting	1,120,040	15.6%		
Grantham	Welham St Car Park	200,975	2.8%		
Grantham	Isaac Newton Car Park	194,362	2.7%		
Total of Buildings Above		**6,475,925**	**90.3%**	**12,694,148**	**95.0%**
Total of All Buildings		**7,165,062**		**13,362,850**	

Total energy consumption for all SKDC non-residential properties

Utility	Energy Consumption		Cost	
	kWh/year	%	p/kWh	£/year
Electricity	7,099,934	34.7%	8.5	603,494
Gas	13,362,850	65.3%	4.1	547,877
Total Energy	**20,462,784**	**100%**		**1,151,370**

Over the period of monitoring the energy prices have varied considerably.
The unit costs used for the above calculations are based on the latest prices available to the Authority. Electricity: 8.5p/kWh Gas: 4.1p/kWh,

Benchmarking Information for Electricity and Gas Consumption

The table below lists the 9 key buildings under scrutiny with their gross internal area (GIA) and actual energy usage compared with the DEFRA benchmark data.

Electricity		SKDC			DEFRA	
		Use	Area	Average	Typical	G Practice
		kWh	M^2	kWh/M^2	kWh/M^2	kWh/M^2
Grantham	Leisure Centre	1,700,500	6,900	246	258	164
Bourne	Leisure Centre	850,601	2,814	302	237	152
Stamford	Leisure Centre	399,892	2,061	194	237	152
Deepings	Leisure Centre	974,177	3,160	308	258	164
Grantham	Main Offices	692,783	5,518	125	111	84
Grantham	Arts centre	145,739	4,085	36	111	84
Stamford	Arts centre	196,856	2,688	73	111	84
Grantham	Welham St. Car Park	200,975	6,825	29	15	15
Grantham	Isaac Newton Car Park	194,362	5,900	33	15	15

Gas		SKDC			DEFRA	
		Use	Area	Average	Typical	G Practice
		kWh	M^2	kWh/M^2	kWh/M^2	kWh/M^2
Grantham	Leisure Centre	5,066,294	6,900	734	1321	573
Bourne	Leisure Centre	2,216,458	2,814	788	1336	573
Stamford	Leisure Centre	2,131,986	2,061	1,034	1336	573
Deepings	Leisure Centre	2,000,360	3,160	633	1321	573
Grantham	Main Offices	691,301	5,518	125	205	138
Grantham	Arts centre	311,772	4,085	76	205	138
Stamford	Arts centre	275,977	2,688	102	205	138

Notes:

The benchmark data supplied by DEFRA only covers basic building types so care is needed when making comparisons between performance and the benchmark targets.
None of the buildings are achieving the good practice standard, however most are in-line or better than the typical benchmarks.
The offices and arts centres in particular are difficult to measure as the buildings are of multiple design and do not fit easily into any one of the DEFRA categories.
Both the car parks are showing higher than expected energy use, issues with wiring set-ups and under-floor ramp heating contribute significantly to the problem.

STREET LIGHTING AND CCTV

Actual data on street lighting efficiency is not available as the supply is not metered. Billing is based on an inventory of columns and bulb wattages multiplied by the number of lighting hours of use. A recent survey has been undertaken and the 1.12 million kWh (586 tonnes of CO_2) is now an accurate reflection of our lighting inventory.

TRANSPORT

Transport use and CO_2 emissions from all Council fleet operations for 2008/9 is set out in the table below:

2008/09	Miles travelled	%	Tonnes CO_2	%
Business mileage	424,549	16.5	141	6.9
Pool car mileage	207,413	8.1	46	2.6
Fleet mileage	1,542,061	60.0	1,650	81.0
External contractors	395,712	15.4	174	8.5
Cultural Acts	2,305	0.1	25	1.2
Total	**2,572,040**	**100**	**2,036**	**100**

Business mileage - Staff travel in their own cars on SKDC business (based on fuel claims).

- SKDC staff use their own vehicles for which a fixed mileage rate of 40p per mile is paid.

Pool car mileage – Staff utilize a fleet of pool cars to carry out SKDC business.

- The majority of the pool cars are 1.2 Renault Clio's (petrol) which are maintained in accordance with the manufacturer's schedule. During 08-09 a planned exchange of pool cars started with the Clio's being exchanged for Citroen C1's (diesel) which have a very low (109g) CO_2 emission, this program will be completed during 09-10.

Fleet mileage – SKDC refuse lorries, vans and other support vehicles.

Contractor mileage – external gas and grounds maintenance vehicles and cultural acts.

Waste

When waste products are taken for disposal, either by landfill or incineration they generate greenhouse gases. A baseline figure for the quantity of waste produced at the Council offices and resultant carbon emissions has been estimated at 22 tonnes per year.

Procurement

Sustainable procurement is a national and international agenda item. The Johannesburg Earth Summit recommended that "relevant authorities at all levels should promote procurement policies that encourage the development and diffusion of environmentally sound goods and services" Currently sustainability is not an integral part of South Kesteven's procurement policy and practice

OBJECTIVES AND STRATEGY

Tackling Climate Change is a corporate priority for the Council. We have developed a priority action plan which aims to reduce carbon emissions by a factor of 12.5% by 2011 (based on our 2008/9 baseline). This will be achieved by taking action to:

- Reduce energy consumption from Council managed buildings.
- Promote the use of renewable sources of energy.
- Reducing the number of business miles travelled by staff in cars.
- Promote the use of more environmentally friendly fuels for all vehicles.
- Encouraging a more environmentally friendly approach to travelling to and from work by our employees.
- Reducing the amount of paper we use.
- Reducing our consumption of water.
- Recycling our waste.
- Buying more environmentally friendly equipment and materials.
- Encouraging similar behaviour in the people we do business with (sustainable procurement policy).

In addition Central Government has produce the following National Indicators.[3]
The targets that have been set have been agreed with the LAA

NI	Description	Target Date	Target
NI 185	Reducing CO_2 emissions from Local Authorities	2008/09 2009/10 2010/11	Establishing and agreeing CO_2 baseline Reduction of 7.5% on baseline Further reduction of 5% on baseline
NI 186	Per capita reduction in CO_2 emissions in the LA area	Note [1]	
NI 188	Adapting to climate change	2008/09 2009/10 2010/11	Level 1 Level 2 Level 3
NI 189	Flood and coastal erosion risk management	Note [1]	
NI 197	Improving local biodiversity	Note [1]	
NI 193	Percentage of Municipal waste land filled	2008/09 2009/10 2010/11	49.29% [2] 48.57% [2] 47.86% [2]

Notes:

[1] Targets are not required to be set
[2] These figures are pro-rata the agreed JMWMS target of 55% Recycling & composting by 2015
[3] Further information on NI's for Local Authorities is available at www.communities.gov.uk

ACTIONS

REDUCING EMISSIONS FROM BUILDINGS

There are a number of actions that the Council is able to undertake to reduce the CO_2 emissions from its buildings as recommended by the Carbon Trust report[1] attached as Appendix 1 of this document.

The proposed actions are detailed in the tables below;

EWP 1	**Buy green energy (energy from renewable sources) when existing contracts are renewed, if available.**
Target completion:	Ongoing
Potential CO_2 savings	2 tonnes / year is the average reduction that you can make to your CO_2 footprint by switching your home to a 100% renewable energy tariff. How big is 2 tonnes of CO_2? 1/3 of the annual CO_2 footprint from household energy use in the average UK home. Enough to fill two Olympic size swimming pools. The same amount saved by unplugging your T.V. for 44 years.* The same amount emitted by the average car each winter.[2]
Detail:	Look to negotiate buying green energy when electric contracts come up for renewal, subject to advice from our energy procurement provider.
Rationale:	It is recommended to look at the purchase of green energy for our sites which will give us a green ethic. However with demand outstripping supply, there are numerous options to look into before procuring this option. With all but one of the six major utility companies unable to provide this product at present due to high demand. Unit rates for green energy at present are at a premium.
Risks:	Availability and costs involved.
Next steps:	Implement the measure. Start Date ongoing. Corporate Area – Finance & Resources.

[1] Carbon Trust Report Energy Management and Opportunities Assessment for South Kesteven District Council July 2007
[2] http://green.energyhelpline.com/xhl/page_a.aspx?ref=ghl_CO2facts

EWP 2	**Develop an energy usage database to provide more accurate information on energy usage of our buildings**
Target completion:	April 2010
Potential CO_2 savings	None from database, but use of database up to 10% saving[1]
Detail:	To install monitoring and targeting software for our sites, look at how to procure software database from annual contract or ownership
Rationale:	To be able to monitor our energy usage at initially our 8 major sites so we can identify where energy is being used inefficiently and at what times. To implement targets and set alarms to raise awareness of problem areas within the software.
Risks:	Few risks foreseen possible ongoing costs of software updates
Next steps:	Implement the measure. Start date : April 2009. Corporate Area – Finance & Resources.

[1] Carbon Trust Report, July 2007 attached as Appendix 1

EWP 3	Promote reduced use of energy across the organization by induction training for new starters, Energy Champions in each section & by raising general awareness via posters etc
Target completion:	Ongoing
Potential CO_2 savings	Survey of I.T[1] within main offices found that: ▪ 18% computers left on ▪ 4.18% display screens left on ▪ 32.15% display screens on standby
Detail:	To raise awareness of energy efficiency across the Authority as a whole Invite staff from all sites to give energy saving suggestions To have energy champions in each section or on site To have regular meetings on suggestions given by staff so champions can inform there various areas. Look to benchmark data from energy initiatives
Rationale:	Because the activities and occupation of the buildings a significant energy saving measure will result from personal initiatives, so having enthusiastic members of staff to be energy champions who can create interest in reducing energy usage is a proven method to involve others.
Risks:	This needs to be an ongoing action and making sure if energy champions leave they are replaced
Next steps:	Implement the measure. Start Date: November 2008 Corporate Area – Corporate and Customer services

[1] Survey of 566 appliances surveyed in July 2006

EWP 4	Investigate the feasibility of installing solar panels and photovoltaic panels to assist main energy source and lower CO_2 produced.
Target completion:	Sept 2009
Potential CO_2 savings	none by investigation, For larger households (4-5people), it may be necessary to fit a larger solar installation 30-40tubes to get the same percentage of hot water requirements, but even if a smaller system is fitted, every kWh produced will save 1 kWh of fossil fuels, and 0.5kg of CO_2 emission[1]…
Detail:	Source information on the various types of panels available Locate areas on sites where this technology can be installed Look at companies who provide and install panels Source grant funding availability
Rationale:	The main offices over a very good site to install this technology.
Risks:	No risks are foreseen
Next steps:	Implement the measure. Start Date: January 2009 Corporate Area – Finance & Resources.

[1] navitron.org.uk

EWP 5	Agree energy and water monitoring arrangements and reduction targets with new leisure centre contractor
Target completion:	Reduction of 20% by 2013 in house target
Potential CO_2 savings	20% by 2013
Detail:	Negotiate within new leisure contract
Rationale:	As our leisure centres are some of our largest users of energy we need to make sure that they are as efficient as possible. Reduction targets have been included and are in line with our own in house CO_2 reduction of 20% by 2013
Risks:	No risk foreseen
Next steps:	Implement the measure. Start Date: commencement of contract

	Corporate Area – Finance & Resources.
EWP 6	**Promote reduced use of paper by revising printing arrangements, increased use of duplex printing and electronic record keeping**
Target completion:	20% reduction by March 2010
Potential CO_2 savings	The Council uses approximately 5.5 million sheets of paper in an average year. We aim to reduce this by 20% which will have a significant saving on CO_2
Detail:	Look to remove single type printers from individual workstations,
Rationale:	To save paper and printer consumables
Risks:	Capacity of IT resources and budgetary requirements
Next steps:	Implement the measure. Start Date: April 2008 Corporate Area – Finance & Resources/Partnerships and Organisational Improvement

EWP 7	**Promote sustainable use of water**
Target completion:	April 2010
Potential CO_2 savings	None from promoting this action
Detail:	To minimise water usage of potable and sewerage supply
Rationale:	Reducing water wastage
Risks:	Capital cost for installation and plumbing
Next steps:	Implement the measure. Start Date: November 2008 Corporate Area – Finance & Resources.

EWP 8	**Change drinking water fountains to mains feed type**
Target completion:	April 2009
Potential CO_2 savings	The Council consumes approximately 1,000 bottles of water per year. It takes 3 times as much water to make the plastic container as it does to fill it with water[1.] Changing to mains fed water supplied coolers will save CO_2 in terms of the manufacture of plastic, mileage made in weekly deliveries, and the eventual disposal of the plastic bottles. Currently there are 200,000 tonnes of CO_2 produced by the bottled water industry per year[2.]
Detail:	Replacement of bottled water coolers to mains water
Rationale:	To minimise the manufacture, transport and collection of plastic bottles.
Risks:	Installation costs
Next steps:	Implement the measure. Start Date: April 2008 Corporate Area – Finance & Resources.

[1.] source: bottledwaterblues.com.
[2.] source: timesonline.co.uk)

Transport & Commute

T1	Review procurement specification, usage and management of pool cars to reduce environmental impact
Target completion:	April 2009
Potential CO_2 savings	None from the review, but the outcome of the review will have an impact which can then be calculated
Detail:	Ensure the staff can meet work requirements in the most environmentally efficient way, with fuel efficient vehicles, car sharing, working from home, and smart route planning.
Rationale:	To reduce carbon emissions and cost of pool car fleet
Risks:	Costs of fuel efficient vehicles, maintenance and availability of fuel types.
Next steps:	Implement the measure. Start Date: September 2008 Corporate Area – Healthy Environment.

T2	Develop a "Green Travel Plan" for employees discouraging unnecessary travel and encouraging more use of less damaging alternatives
Target completion:	April 2010
Potential CO_2savings	"Often over 25% of a company's carbon footprint can be attributed to travel. *After (reducing) just 4 half-mile return trips you will have saved 1kg of CO2*[1.]
Detail:	To champion alternative travel arrangements for employees
Rationale:	To reduce the carbon burden from commuting and business miles.
Risks:	IT resources for communication, changes to work habits
Next steps:	Implement the measure. Start Date: January 2009 Corporate Area – Healthy Environment.

[1.] **Sue Welland, Founder & Creative Director The Carbon Neutral Company**

T3	Review facilities available for cyclists
Target completion:	April 2010
Potential CO_2 savings	Minimal CO_2 savings are expected but will assist in promoting the healthier lifestyle agenda *A 35 year old man cycling 12 miles a day extends his life expectancy by two and a half years compared with someone who takes no exercise*[1.]
Detail:	Review cycling arrangements for employees for commuting and local business travel.
Rationale:	To encourage cycling to reduce car usage on local journeys
Risks:	low take up
Next steps:	Implement the measure. Start Date: January 2009 Corporate Area – Healthy Environment.

[1].Push Bikes Campaign

T4	Optimise use of home/remote working to reduce the number of miles travelled to and from work
Target completion:	March 2012
Potential CO_2 savings	Transport is the fastest growing source of greenhouse gas emissions, and commuter and business travel constitute nearly 40% of miles driven by car. An effective travel plan can reduce commuter car travel by 10 - 30%.[1.]
Detail:	To review policy and operational arrangements to enable home or remote working
Rationale:	To reduce travel and employee overheads
Risks:	IT functionality and capacity
Next steps:	Implement the measure. Start Date: April 2010 Corporate Area – Corporate and Customer Services

[1.] Director General British Chamber of Commerce

T5	Promote environmentally friendly driving across the Council
Target completion:	Ongoing
Potential CO_2 savings	Motorists waste 350,000 tonnes of fuel every year by getting lost[1].
Detail:	To encourage staff to undertake eco-driving training
Rationale:	Fuel optimisation
Risks:	Staff behaviour change and take up.
Next steps:	Implement the measure. Start Date: September 2008 Corporate Area – Healthy Environment

[1.] The Automobile Association (AA)

T6	Review procurement specification for refuse collection and street cleansing fleet
Target completion:	April 2009
Potential CO_2 savings	None by carrying out the feasibility study. Potential savings by converting to alternative fuels
Detail:	Review existing work done on alternative fuels and explore current options
Rationale:	Increasing fuel costs and potential supply concerns
Risks:	Lack of availability and costs
Next steps:	Implement the measure. Start Date: September 2008 Corporate Area – Healthy Environment

Waste

W1	Include waste recycling to leisure contractor
Target completion:	on commencement of contract
Potential CO_2 savings	Currently there are no figures available to show the percentage of waste recycled by the leisure contractor. Under the terms of the new contract, recycling is a required function of the contractor and this will be monitored on an ongoing basis.
Detail:	Ensure contractor uses recycling arrangements
Rationale:	To reduce waste to landfill
Risks:	Continuity of monitoring to ensure contract compliance
Next steps:	Implement the measure. Start Date: commencement of contract Corporate Area – Finance & Resources

W2	Monitor and promote staff usage of the recycling system
Target completion:	65% of office waste recycled by March 2009
Potential CO_2 savings	For 2007/08 the recycling rate was 51.38% with an estimated 51.4 tonnes of refuse being sent to landfill. Recycling 1 tonne of newspaper eliminates 3 cubic metres of landfill[1.] Recycling causes 35% less water pollution and 74% less air pollution[2.]
Detail:	Encourage and promote energy champions within service areas to increase recycling through inter departmental competition
Rationale:	Recycling saves carbon emissions from landfill and incineration and we receive recycling credits.
Risks:	Staff alienation
Next steps:	Implement the measure. Start Date: April 2008 Corporate Area – Finance & Resources

[1.] Sudbury, Jodi B. (1989). *50 Simple things you Can do to Save the Earth.*
[2.] Recycling on the Go

W3	Ensure that all printer, photocopier toner cartridges and mobile phones are being recycled/re-used
Target completion:	Ongoing
Potential CO_2 savings	Mobile phones that are landfilled (non compliant with WEE regs) lead to discharge of toxic metals such as lithium, cadmium, mercury and lead. Also the plastic part of the phone will not breakdown and rot thus using valuable landfill space. A new mobile phone is sold every minute in the UK. Each new phone leaves a carbon footprint of 32 global square metres – recycling and reusing phones reduces the negative impact they have on the environment.[1]
Detail:	Arrangements to be in place for all printer/photocopier cartridges and mobile phone hardware
Rationale:	compliance with waste legislation (WEEE regs)
Risks:	Availability of suppliers
Next steps:	Implement the measure. Start Date: April 2008 Corporate Area – Finance & Resources Partnerships and Organisational Improvement

1. emc-recycle.com

W4	Encourage recycling/re-use of all electrical equipment.
Target completion:	Ongoing
Potential CO_2 savings	In the UK alone more than 1 million tonnes of waste electrical goods are disposed of annually.[1.]
Detail:	Encourage the re-use and recycling of redundant equipment
Rationale:	Compliance with waste legislation
Risks:	Storage capacity
Next steps:	Implement the measure. Start Date: April 2008 Corporate Area – Partnerships and Organisational Improvement

[1.] Energy Saving Trust

Sustainable Procurement

BGS1	Promote Sustainable Procurement activity and monitor purchases
Target completion:	Ongoing
Potential CO_2 savings	Sustainable procurement is about the process of purchasing goods and services that takes into account the social, economic and environmental impact that such purchasing has on people and communities. It is about considering what products are made of, where they have come from, who has made them, how they are transported and how they are eventually disposed of. It may even be about whether the purchase requires to be made at all. Sustainability can be incorporated into the whole procurement process: defining the need, evaluating options, design and specifying, supplier selection, tender evaluation, post-contract management and supplier development [1]
Detail:	To build into all council procurement activities a policy to require sustainable outcomes
Rationale:	To benefit the environment and reducing carbon footprint
Risks:	Increased costs, lack of availability
Next steps:	Implement the measure. Start Date: already commenced Corporate Area – Finance & Resources

[1.] Solace (Society of local authority Chief Executives and Senior Managers)

BGS2	Ensure that the Asset Management Plan has regard to sustainable construction targets
Target completion:	Ongoing 3 year revisions
Potential CO_2 savings	Wood products serve to store carbon throughout their lifetime and the amount of carbon stored in products is increasing by about 540 million tons of CO2 per year[1.] The incidence of illegally produced woodis usually estimated at8-10%of global wood production [2.]
Detail:	To ensure current and new project build incorporate sustainable practices and materials
Rationale:	To lead by example
Risks	Increased costs and public acceptance of change
Next steps:	Implement the measure. Start Date: April 2008 Corporate Area – Finance & Resources

[1.] NCASI 2007)
[2.] www.sustainableforestprods.org