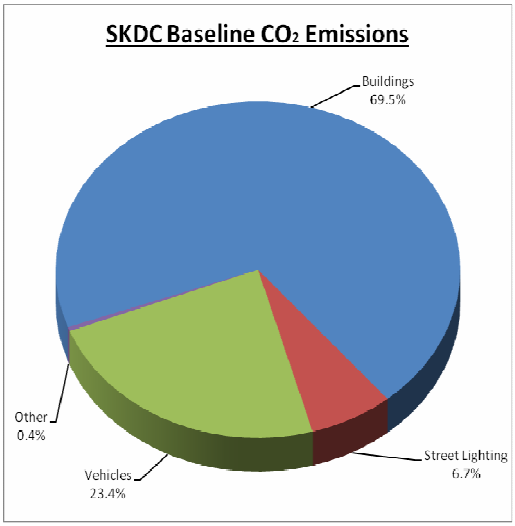
SOUTH KESTEVEN DISTRICT COUNCIL
CARBON MANAGEMENT PLAN 2008-2013

Executive Summary

At South Kesteven District Council we are committed to taking an important local leadership role on climate change. We signed the Nottingham Declaration on climate change in October 2006 committing to tackle the causes and effects of a changing climate on South Kesteven. A key part of that role is to lead by example and our Carbon Management Plan sets out how we will do this over the next five years.



Our Carbon Management Plan sets out the acknowledged areas of opportunity to reduce our emissions and reduce the cost of delivering services:

- Energy efficiency investment in building stock
- Reducing the waste we send to landfill
- Managing our vehicle fleet
- Influencing how our staff travel to work.

We are already putting in place the building blocks to ensure that carbon management will be an integral part of how we make decisions and act on a day to day basis. The Carbon Management Plan is the starting point for our commitment to engage with staff, members and our working partners to achieve carbon reduction. We expect to find other partners willing to add their expertise and efforts including various energy related groups.

Tackling the causes and effects of climate change is one of the key action themes included in the Lincolnshire Area Agreement (LAA). All of the Lincolnshire local authorities, the Police, Primary Care Trusts and other agencies have endorsed the need to address this issue.

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. We are confident that we will achieve better reductions than our targets as defined by DEFRA.

This Plan was considered and approved by the Cabinet on 6 October 2008
We recognise and support the actions in it.

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Leader Chief Executive

Section 1 - Why, what, when and how?

Why do we need a carbon management plan?

Scientific evidence confirms that man-made emissions of greenhouse gases, that are produced when fossil fuels (coal, oil and gas) are burned to make energy, is contributing to climate change.

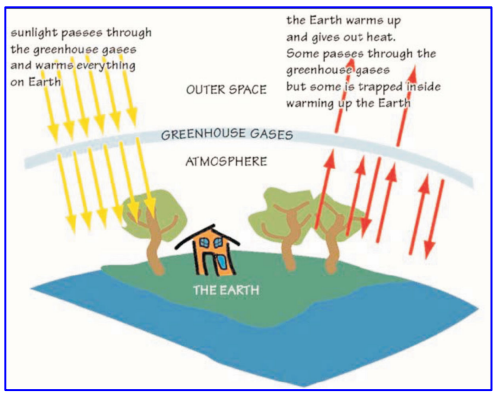


Figure 1 (opposite) shows what effect green house gases have on our world:
We must reduce greenhouse gas emissions to minimise or reverse their impact. Even so, some climate change is inevitable due to the inertia in the climate system. To overcome its effects we will need to adapt our lifestyles.

The Carbon Management Plan is the first step towards reducing greenhouse gas emissions produced by council activity; it assesses the Council's carbon emissions footprint. Next we will need to examine how we will continue to reduce our impact as a whole organisation in the future. Initially we have planned short to medium term actions to achieve our target, however we recognise that we will need to do more in the long term.

How have we calculated our carbon footprint?

The primary focus of this plan is to reduce emissions under our control and encourage the same commitment from our contractors. The various fuel types that the council use to heat (gas) and light (electricity) our buildings together with the fuels (petrol/diesel) that run our vehicle fleet have all been accurately calculated for the year 2008-09, thus creating our energy baseline. This information is then fed though DEFRA's monitoring tools which work out the corresponding CO_2 emission baseline.

Emissions are referred to as greenhouse gas emissions and tonnes of carbon in the report. All emissions are converted to CO_2 equivalent for the purposes of the baseline and calculations. For South Kesteven, this includes considering emissions from our buildings, leisure centres, all our vehicles, paper and water usage.

What does our carbon footprint look like?

The final result from the analysis of our energy use for 2008-09 shows that we:

- Emitted approximately 8690 tonnes of CO_2.
- Could reduce this by as much as 38% using good practice approaches
- Could save approximately £140,000 each year on reduced energy, fuel and resource costs (depends on the raw cost of energy at the time of renewing utility contracts)

What are we aiming to do?

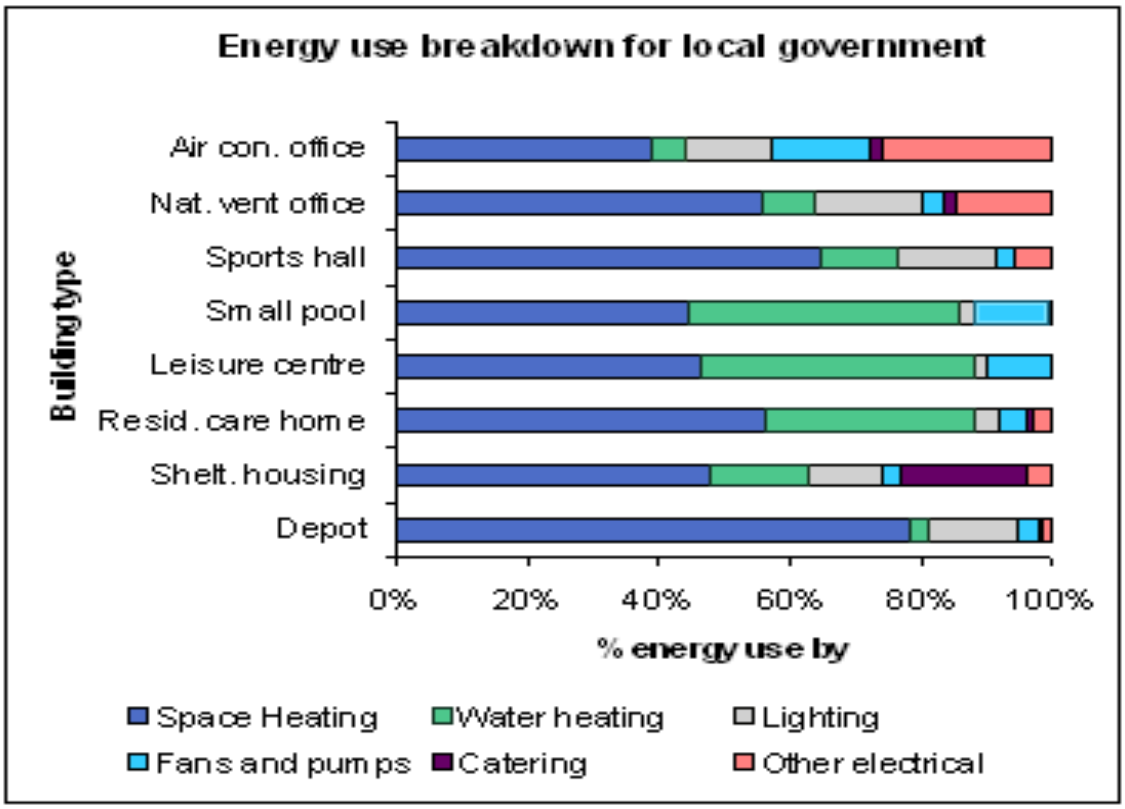
Since tackling Climate Change is a priority for the Council we have developed a priority action plan which aims to reduce carbon emissions by a factor of 12.5% by 2011 (2008-09 baseline). This will be achieved by:

- Reduce energy consumption from Council managed buildings.
- Promote the use of renewable sources of energy
- Reduce the number of business miles travelled by staff in cars.
- Promote the use of more environmentally friendly fuels for all vehicles.
- Encourage a more environmentally friendly approach to travelling to and from work by

our employees

- Reduce the amount of paper we use
- Reduce our consumption of water
- Recycle more of our waste
- Buy more environmentally friendly equipment and materials
- Encourage similar behaviour in the people we do business with (sustainable procurement policy)

Energy usage for a typical Local Authority



http://www.carbontrust.co.uk/energy/startsaving/sectorselector/localgovernment_13.htm

Summary of energy saving opportunities

First we will concentrate on 'quick wins', taking the measures which cost us the least, and are easy to implement. Some of this work has already been done.
Next we plan to:

- Start monitoring and measuring energy efficiency for our major sites
- Start profiling electricity use for the eight major buildings.
- Appoint 'energy champions' in service teams.
- Replace our vehicles with more energy efficient models

The potential CO_2 savings if all of these actions are taken will help us to achieve our 12.5% reduction. More detail on the actions we are planning to take and their impact on the environment are contained in the action plans (section 2).

How will we be monitoring progress?

We have to lead on improving the environmental impact of our business. The Environmental Protection Service will be leading on climate change issues, monitoring progress and coordinating information across the organisation. Like all of our key activities, regular reports will be made to our management teams and elected members on progress and will include all the national performance indicator information.

What does it cost to run a 3kW fan heater for a month?

1. Item - Enter the item you are costing, e.g. Light bulb	Other item
2. Amps rating.	13 Amps
3. Voltage Rating - Usually 230 Volts	230 Volts
4. Amps x Volts = Watts (Start from here if Wattage known)	2990 Watts
5. Watts/1000 = kilowatts or kW	2.99 kW
6. Hours used in month (use an average)	148 Hours
7. Kilowatts x Hours = Kilowatt Hours or kWh	442.52 kWh
8. Cost of electricity (in pence per kWh - enter the cost you pay)	10 pence
9. kWh x pence = Cost (in pence) to run the Item for 1 month	4425.2 pence
10. Divide by 100 to get to Cost in £'s to run Item for 1 month	£ 44.252
11. x Number of the same Items in the house	1 Items
	44.252

Answer - £44.25

What does it cost to run a desktop computer and monitor non-stop for a month?

1. Item - Enter the item you are costing, e.g. Light bulb	Other item
2. Amps rating.	1.087 Amps
3. Voltage Rating - Usually 230 Volts	230 Volts
4. Amps x Volts = Watts (Start from here if Wattage known)	250.01 Watts
5. Watts/1000 = kilowatts or kW	0.25 kW
6. Hours used in month (use an average)	572 Hours
7. Kilowatts x Hours = Kilowatt Hours or kWh	143 kWh
8. Cost of electricity (in pence per kWh - enter the cost you pay)	10 pence
9. kWh x pence = Cost (in pence) to run the Item for 1 month	1430 pence
10. Divide by 100 to get to Cost in £'s to run Item for 1 month	£ 14.3
11. x Number of the same Items in the house	1 Items
12. = £ Cost to run all such Items in house for 1 month	£ 14.3

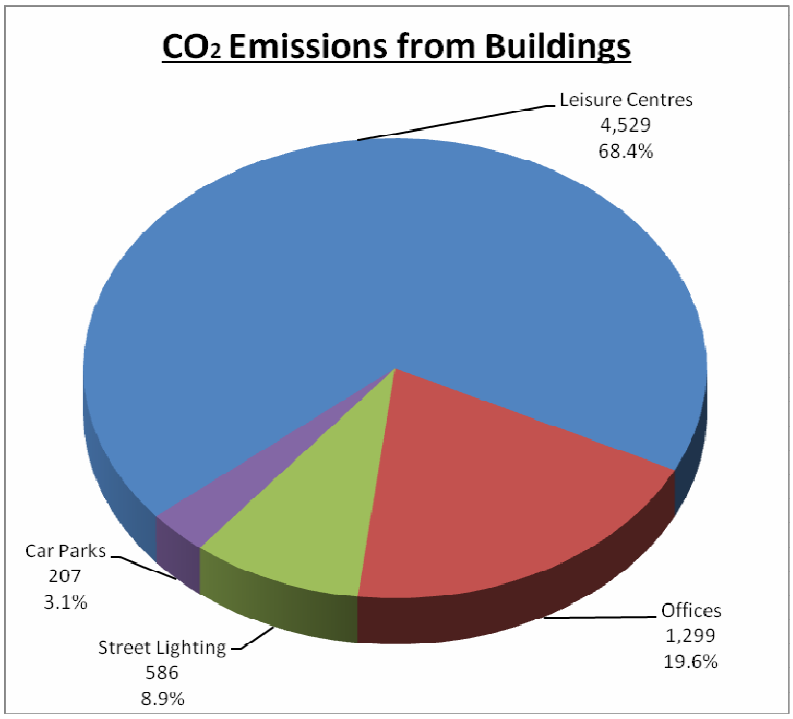
Answer - £14.30

Section 2 – Actions to reduce our carbon emissions

Buildings

We have already implemented the following energy efficiency measures:

- Energy audit by the carbon Trust of our 8 largest energy using sites
- Fitted lighting motion sensors to corridors
- Introduced a rolling programme to renew windows with those of a higher thermal efficiency
- Rolling programme of replacing cooled bottled drinking fountains with mains fed
- Rolling programme of centralized high efficiency printers



Note :
Offices and car parks combined significantly contribute to our carbon footprint this is a key area to target. Our Leisure Centres are very large users of energy and so targets have been included in the latest contract to ensure that maximum CO_2 reductions are achieved.

Guide to Action Plan Abbreviations
It has proved difficult to attach clear costs and benefits to some of the actions detailed below.
However the following symbols indicate the scale of resource required and the extent of impact on CO_2 or cost reduction;

Resources required – Approximate costs involved £'s
£ = Small ££ = Medium £££ = Large

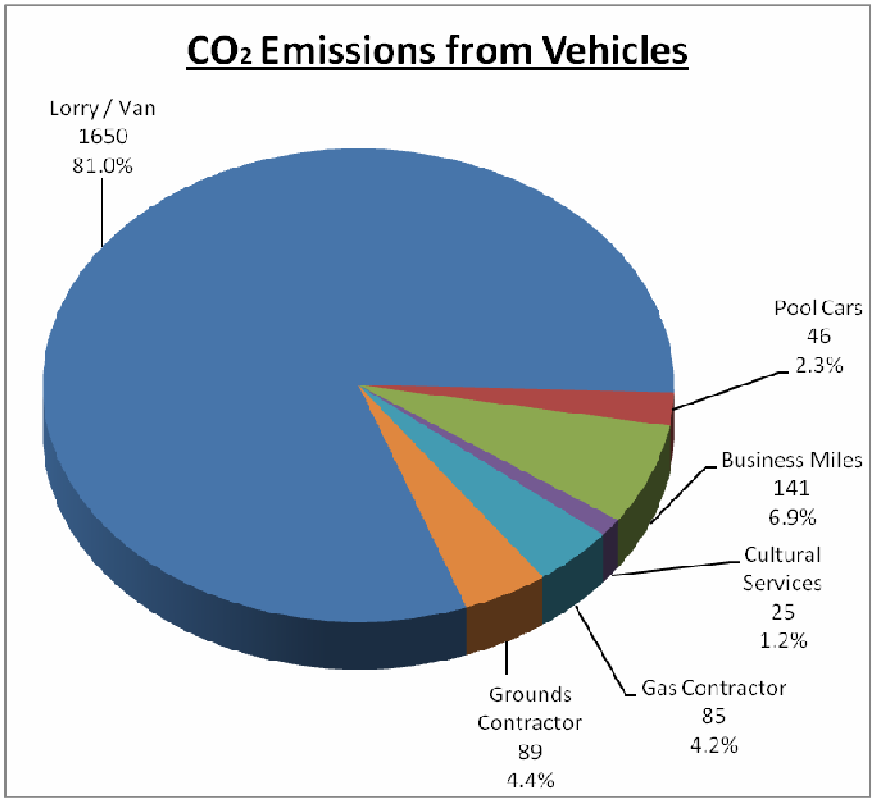
Reduction in carbon emissions – approximate CO_2 reduction tonnes
☺ = Small ☺☺ = Medium ☺☺☺ = Large

Ref.	Action to be taken	Target	Start date	Potential CO_2 Reduction	Resources required	Corporate Area
EWP 1	Buy green energy where possible (energy from renewable sources) when existing contracts are renewed	Ongoing	Ongoing	☺	££	Finance & Resources
EWP2	Develop an energy usage database to provide more accurate information on energy usage of our buildings	April 2010	April 2009	☺☺	££	Finance & Resources
EWP 3	Promote reduced use of energy across the organisation by induction training for new starters, 'Energy Champions' in each section & by raising general awareness via posters etc .	Ongoing	Nov 2008	☺	££	Corporate and Customer services/ All
EWP4	Investigate the feasibility of installing solar panels and photovoltaic panels to assist main energy source and lower CO_2 produced.	Septemb er2009	January 2009	--------	£	Finance & Resources
EWP5	Agree energy and water monitoring arrangements and reduction targets with new leisure centre contractor	12.5% reductio n by 2011	Commenceme nt of the contract	☺☺☺	£	Finance & Resources
EWP6	Promote reduced use of paper by revising printing arrangements, increased use of double sided printing and electronic record keeping	12.5% reductio n by 2011	April 2008	☺☺	££	Finance & Resources / Partnerships & Organisatio nal Improveme nt
EWP7	Promote sustainable use of water	April 2010	Nov 2008	☺	£	Finance & Resources
EWP8	Change drinking water fountains to mains feed type	April 2009	April 2008	☺	£	Finance & Resources

Transport

We have already implemented the following energy efficiency measures:

- Published and circulated to all staff a greener driving leaflet to encourage fuel saving driving
- Introduce working from home to reduce commuter mileage for certain sections/ individuals.



Ref.	Action to be taken	Target	Start date	Potential CO2 Reduction	Resources required	Corporate Area
T1	Review procurement specification, usage and management of pool cars to reduce environmental impact	Apr 2009	Sep 2008	☺	£	Healthy Environment
T2	Develop a "Green Travel Plan" for employees discouraging unnecessary travel and encouraging more use of less damaging alternatives	Apr 2010	Jan 2009	☺	£	Corporate HR/ Healthy Environment
T3	Review facilities available for cyclists	Apr 2010	Jan 2009	☺	£	Healthy Environment
T4	Optimise use of home/remote working to reduce the number of miles travelled to and from work	Mar 2012	Apr 2010	☺☺	£	Corporate and Customer Services

T5	Promote environmentally friendly driving across the Council	Ongoing	Sep 2008	☺	£	Healthy Environment
T6	Review procurement specification for refuse collection and street cleansing fleet	Apr 2009	Sep 2008	☺☺		Healthy Environment

Waste

We have already implemented the following energy efficiency measures:

- Comprehensive waste recycling at St Peter's Hill, Alexandra Rd and area offices
- Recycling requirements have been incorporated within the leisure contracts
- Redundant mobile phones are recycled/reused

Ref.	Action to be taken	Target	Start date	Potential CO_2 Reduction	Resources required	Corporate Area
W1	Include waste recycling to leisure contractor	commencement of contract	commencement of contract	☺	£	Finance & Resources
W2	Monitor and promote staff usage of the recycling system	65% of office waste recycled by March 2009	April 2008	☺	££	Finance & Resources
W3	Ensure that all printer, photocopier toner cartridges and mobile phones are recycled	Ongoing	April 2008	☺☺	£	Finance & Resources / Partnerships and Organisational improvement
W4	Encourage recycling of computers, monitors & printers	Ongoing	April 2008	☺	£	Partnerships and Organisational Improvement

Buying goods and services in a sustainable way

Ref.	Action to be taken	Target	Start date	Potential CO_2 Reduction	Resources required	Corporate Area
BGS1	Promote sustainable procurement activity and monitor purchases	Ongoing	already commenced	☺	£	Finance & Resources
BGS2	Ensure that the Asset Management Plan has regard to sustainable construction targets	Ongoing 3 year revisions	April 2008	☺☺		Finance & Resources

Council Housing Stock

The energy efficiency performance of our housing stock is being assessed as part of a wider stock condition survey. Actions to improve energy efficiency of the stock and to develop the

use of renewable energy generation will be identified following completion of this survey. Amendments will then be made to the Carbon Management Plan

If you are interested in knowing more about our plans, further information can be found in our 'Technical Guide to the Carbon Management Plan'