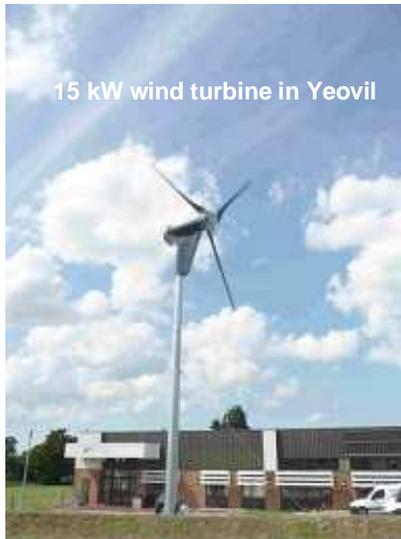


South Somerset District Council

Carbon Reduction & Climate Change Adaptation Strategy

2010 to 2014

“A low carbon council adapting to climate change”



March 2010

Owner: Keith Wheaton-Green

Approval route: Assistant Director for Environment (Laurence Willis) , Assistant Director for Economy (Simon Gale) , Management Board

Our Vision

To make zero or low carbon activity normal rather than exceptional in South Somerset in the public, commercial and private sectors through leading by example, innovation and education.

Making a difference where it counts

A Message from our Portfolio Holder (Environment and Property)

Local government is about so much more than simply delivering statutory services. Councils have a role in advancing local, national and international agendas. South Somerset District Council has had a long tradition of community leadership, working with its communities to shape aspirations and work to find ways in which these can be delivered. This strategy sits beneath the Sustainable Community Strategy where environmental issues including climate change are tackled holistically, with partners.

If the Council is to be successful in achieving the aims and objectives set out in this Strategy, an awareness of the need to address climate change, energy reduction and sustainable development must be integrated fully into all areas of its operations. This strategy aims first at getting our own house in order, to work towards being an exemplar authority and then working with our communities in reaching its carbon reduction target as set out in our Sustainable Communities Strategy. Although this is a global problem, unless everyone acts locally, no change will be achieved.

Our focus is on how SSDC can 'raise its game' in this field, get as close as possible to becoming a carbon neutral authority, become an exemplar nationally and how it can directly influence actions that can make a difference in reducing energy requirements, reducing carbon emissions and increase public awareness of the issue.

We can't simply put up a wind turbine or cut our business mileage and expect to be considered an exemplar authority. Nor can we get away with replacing a fossil fuel boiler with another fossil fuel boiler due to initial costs. When making the choice between short term financial or carbon savings, we should choose carbon. However, most carbon reduction projects also deliver financial savings. In today's financial climate of budget cuts and lean thinking, we cannot afford to miss any opportunity for long-term structural reductions in our operational costs.

Actions contained within this strategy are intended to be realistic, achievable and measurable.

*Tom Parsley
Portfolio Holder – Environment and Property*

What is Climate Change?

Recent climate events now indicate a clear pattern. The last five year period was the hottest in Britain since records began and April 2007 was the warmest on record. All around the world people are reporting extreme and abnormal weather such as flooding, hurricanes, and drought. The most recent report from the Intergovernmental Panel on Climate Change (IPCC) - a body that represents the authoritative scientific consensus on climate change - leaves us with no doubt that human activity is the main driver of climate change.

We are now experiencing what is just the start of a change in climate around the world. No area will remain untouched and adaptation to these changed circumstances will be challenging and in some places impossible. We can limit the extent of climate change and human suffering by acting now to reduce carbon dioxide emissions as quickly as possible.

How do carbon emissions contribute?

Several naturally occurring gases have the effect of trapping the sun's heat in the atmosphere. Without these gases, the world would be cold and uninhabitable, as heat would be instantly radiated back out into space. These gases are:

- Carbon dioxide, which living organisms create and which plants need as one of the raw materials for photosynthesis when carbon is fixed into the structure of the plant;
- Methane, which is produced wherever dead plant and animal material is rotting or fermenting.

Collectively, they are described as green house gases because they have the same effect as the glass on a greenhouse.

Life on earth has been taking carbon out of the atmosphere almost since life began and storing it underground in sediments of limestone and layers of dead plant material that have formed coal, oil and gas. These fossil fuels, deposited over millennia, are now being converted back to atmospheric carbon dioxide within just a few hundred years through burning in car and jet engines, power stations and domestic boilers. Levels of the gas will soon have doubled from that found at the beginning of the industrial revolution.

Carbon dioxide is by far the most significant gas influencing climate change. Although methane is 22 times more potent a greenhouse gas than carbon dioxide and is released from animals, landfill sites, and wetlands, the quantities released to the atmosphere are much smaller and are due to natural processes of decay and fermentation. The gas is degraded in the atmosphere after just 8 years. However, there is concern that methyl hydrates currently trapped within cold sea sediments, and methane currently trapped in the vast permafrost areas straddling the North Pole could be released as the world warms up. In this unwelcome scenario rapid and irreversible climate change would be the result.

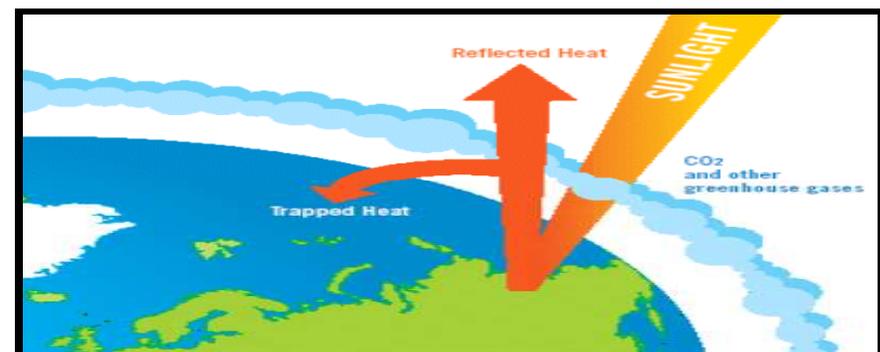


Diagram showing the effect of greenhouse gases

What might climate change mean for us?

In the South West of the UK we can expect more unpredictable weather, possibly resulting in stronger winds and heavier rain leading to increased incidence of flooding events and rising sea levels, which will accentuate coastal erosion and flood low lying areas. The Somerset Levels and Moors are obviously particularly vulnerable and only very substantial engineering works (possibly to include a Severn Barrage) will prevent the formation of a new, large, natural harbour reaching to the edges of Langport, Somerton and Compton Dundon.

The South West Climate Change Impacts Partnership (www.oursouthwest.com/climate) indicates the following key changes for the South West:

Summer:

2050's: Warmer by 1.5-3.5°C, drier by 15-30%

2080's: Warmer by 2-5.5°C, drier by 25-55%

Winter:

2050's: Milder by 1.0-2.0°C, wetter by 5-15%

2080's: Milder by 1.5-3.5°C, wetter by 5-15% and 70-90% less snow

Warmer weather might seem a reasonable trade off for occasional unpleasant extremes of heat, wind and floods, especially in a developed country such as the UK, which has the finance, technology, and organisation of civil society to cope. However, other parts of the world will be much less fortunate. In areas where it just stops raining and the land becomes arid, it could become impossible to make a living or grow food.

As the recent Stern Report pointed out, there is an economic cost to climate change in addition to the cost in human suffering and the more rapid our response to the need to cut carbon dioxide emissions, the less these costs will eventually be.

Why should South Somerset act to reduce carbon dioxide emissions?

Local authorities have a social responsibility to introduce measures that reduce carbon and as democratically elected bodies also have the responsibility of leading communities in reducing carbon. National Indicators now mean that we are measured in both of these areas. Projects may be initially expensive but are likely to have both financial and environmental long term benefit. A thriving community is one that has planned for the future rather than focusing on the short term.

The Benefits of Early Action

- It slows the rate of climate change, to give our residents and environment time to adapt to the changing situation.
- It preserves dwindling fossil fuel reserves.
- It cuts costs by saving energy.
- It improves the quality of life for residents by facilitating warmer, more economical homes.
- It encourages local businesses to become involved in the renewable energy / sustainable technology and construction.

Is local carbon offsetting effective?

Tree growth absorbs atmospheric carbon dioxide to produce the long chain hydrocarbon molecules of which trees are composed. Although tree planting would offset some of the carbon emissions arising from council activities, it cannot be counted towards the statutory National Indicator 185 carbon emission reporting as quantities of absorbed carbon could only be estimated.

However, tree planting is worthwhile. A tree's carbon absorption is dependent on size, age and species. A standard mature hardwood will typically have absorbed 40 kg a year. Therefore planting 7125 trees

occupying 18 hectares (0.018 % of South Somerset) would be roughly equivalent to 5% of the council's carbon emissions.

Coppiced trees grow the fastest and establishment of new areas of coppice will be useful to supply wood chip boilers that the council and others will be installing.

How this Strategy supports:

(a) Government targets

Starting with a baseline date of 1990, central Government has set a national target to reduce CO2 emissions by 15% – 18% by 2010, 26% - 32% by 2020 and 60% by 2050.

In the March 2008 Budget, the Chancellor announced an intention that all new public service buildings be carbon neutral by 2018. SSDC aims to reach zero emissions by 2050 and take every viable opportunity to reduce emissions as quickly as possible. Our target for 2012 has been informed by our participation in the Carbon Trust's Local Authority Carbon Management Programme.

(b) Local targets

This strategy has a close fit with the goals of the Somerset Sustainable Strategy, the Local Area Agreement, South Somerset Sustainable Community Strategy published in Autumn 2008 and the South Somerset Corporate Plan agreed in January 2009.

What has South Somerset District Council achieved so far?

- In 2001 the council, with Somerset County Council, facilitated the set up of the Somerset Trust for Sustainable Development (now Ecos Trust) whose aim was to make sustainable construction the norm by 2010. They have had real influence towards this aim.
- Since 2001 the council has led a partnership with owners of historic mill sites in the district to develop small-scale hydropower. £137,000 of grant funding has supported installation of renewable energy generation at 7 mill sites.
- Property Services have reduced energy use within our buildings by a range of measures, including automatically dimmable, high frequency, fluorescent light fittings and building management software control systems for effective environmental control.
- SSDC procures green electricity for Brympton Way, Goldenstones and other key sites.
- A 15 kW wind turbine was erected at the Yeovil Innovation Centre in 2009.
- In 2006 the council signed the Nottingham Declaration joining a growing number of councils (over 200) that have committed to taking action on climate change.
- SSDC has taken advantage of free feasibility advice to explore wood heat boilers projects at several council buildings.
- SSDC has prepared guidance to assist developers to comply with the SW Regional Renewable Energy Policy RE5 that expects 10% of the energy required in large new developments to be supplied by on-site renewable micro generation.

- SSDC supports communities to alleviate flooding by minor works to properties and advice on measures to alleviate flooding.
- Twenty-four hour emergency assistance is available to those at risk providing sand bags and flood defenses.
- A Strategic Flood Risk Assessment has been prepared to inform the Local Development Framework and ensure that inappropriate development in areas at risk of flooding is avoided.
- Sustainable Drainage Systems are encouraged to reduce flood risk, by managing surface water drainage in a way that mimics rain falling onto undeveloped land.
- As part of the Somerset Affordable Warmth Partnership we work to develop policies to tackle fuel poverty and increase home energy efficiency. We encourage householders to take up grants to improve the energy efficiency of their own homes.
- SSDC has supported South Somerset Homes to develop and evaluate 18 new dwellings built to code levels 3 and 4, (0 = current building regulations; 6 = 'carbon neutral'). The homes are highly insulated structures with energy provided by low and zero carbon technologies. Lessons from the development and the experience in use will be widely shared and inform future decisions.

Our past and current carbon dioxide emissions *(tonnes CO₂/ annum)*

Energy data for our largest buildings has been compiled for the last five years and fuel used by our vehicle fleet for the last three years. This data has been used to calculate carbon dioxide emissions. *(See Appendix 1 for more detail)*

	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009
Electricity use from our largest buildings	1055	1093	1237	1270	1265	1237	1280
Gas/oil use from our largest buildings	469	457	504	532	543	521	518
Car mileage from our business use			202	199	205	214	203

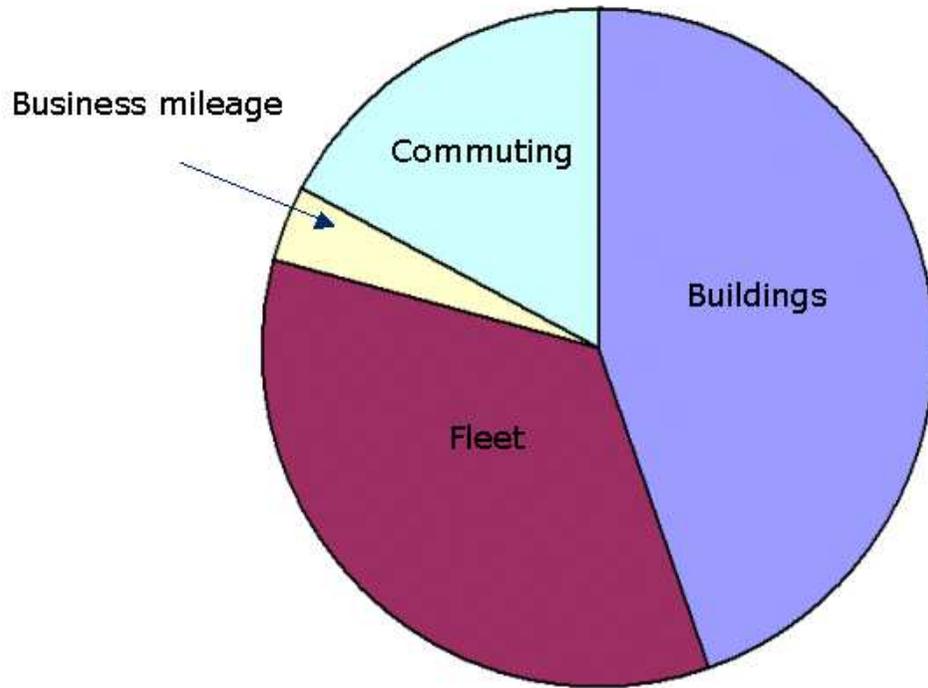
These emissions are below the threshold that obligates engagement in the national Carbon Trading and Carbon Reduction Commitment.

Our Carbon Management Programme

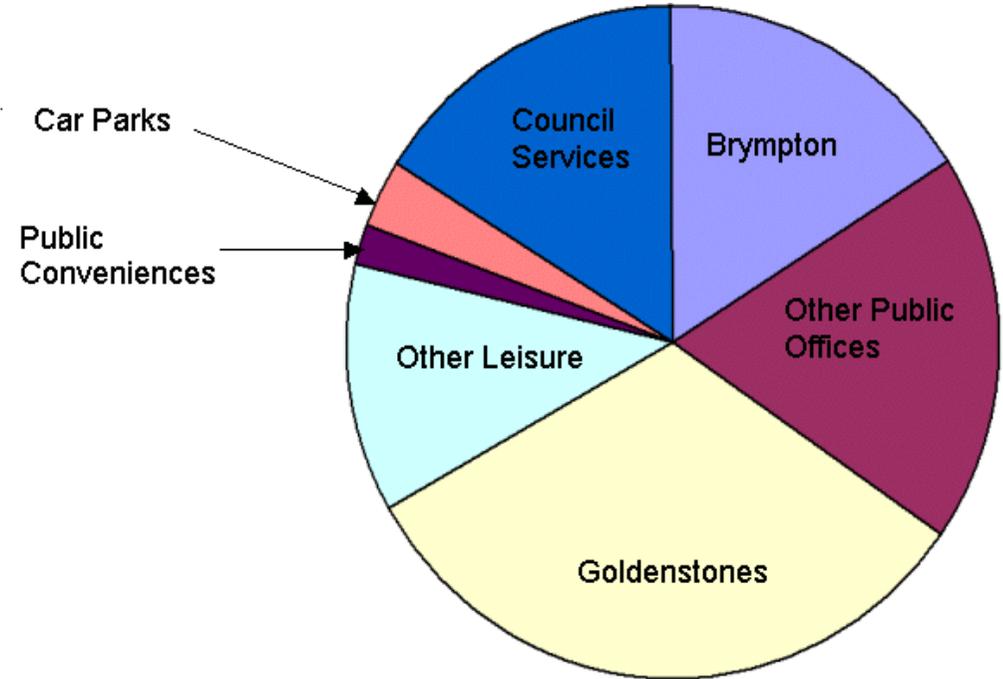
In 2008/09, the council developed a Carbon Management Plan with the assistance of the Carbon Trust's Local Authority Carbon Management Programme and its appointed advisors. Using experience gained from other local authority carbon reduction programmes, we now have a prioritized list of carbon reduction projects across the council's range of activities with costs, carbon and financial savings quantified. The high priority projects are listed in Aim One. We have established an accurate carbon emissions baseline and compiled comprehensive energy data for all council activities for the calendar year 2007 using a spreadsheet provided by DEFRA. This is the base line is shown below.

	Carbon Dioxide emissions 2007
Electricity use from our buildings	1650
Gas use from our buildings	760
Oil use from our buildings	143
Fuel use from our fleet vehicles	1972
Car mileage from our business use	215
Car mileage from commuting	979
Total	5717

Summary of all emissions for baseline year 2007



Summary of buildings emissions for baseline year 2007



Therefore, if actions focus on our vehicle fleet, commuting and on the buildings of Brympton Way, Octagon and Goldenstones significant savings in carbon could be achieved.

Local Government Performance Framework

Starting with the financial year 2008/2009 SSDC is legally obliged by Government to report a number of National Indicators (NI) relating to carbon reduction, adaptation to climate change and air quality.

NI 185: Percentage of CO₂ reduction from local authority operations

NI 185 ensures that we measure our progress in reducing CO₂ emissions from our buildings, fleet and business mileage, including outsourced services. The aim is to give a total carbon emissions figure, to discover whether local authorities are meeting their annual carbon reduction targets and to encourage local authorities to demonstrate clear leadership in tackling climate change.

NI 194: Air Quality - % reduction in NO_x and primary PM₁₀ emissions through local authority's estate and operations

NI 194 ensures that we measure our progress in reducing NO_x (oxides of nitrogen) and primary PM₁₀ (particulate matter) emissions produced largely from combustion processes including vehicle emissions and electricity and heat generation. Both pollutants can cause ill health and high levels of NO_x can contribute to the formation of ground level ozone and greenhouse gas. The indicator will not only target these two pollutants that are often the most prevalent, but will also mean that local authorities will lead by example. Measures to reduce emissions of these pollutants may also lead to reductions in CO₂ emissions, through the use of cleaner vehicles. The same data set and the same spreadsheet is used as for NI 185

NI 188: Planning to adapt to climate change

This is a process indicator. Using the criteria given, we must report our self assessment of progress towards embedding the management of climate risks and opportunities across the all levels of services, plans and estates by:

- Assessing risks and opportunities comprehensively across the district
- Take action in identified priority areas
- Develop an adaptation strategy and action plan setting out the risk assessment and priority areas, where necessary exhibiting leadership among local partners. Actions will need to address these, with risks continually assessed and monitored
- Embedding climate change adaptation into all service delivery and in all decisions made by the council.

NI 186: Per capita reduction in CO₂ emissions in the area

We must report the data for CO₂ emissions per capita in our local authority area using statistics compiled for provided by Defra by AEA Energy and Environment.

How this Strategy supports other council strategic plans and strategies

This Carbon Reduction Strategy has been influenced by and links with the following key strategies and plans:

SSDC Corporate Plan 2009 – 2012 <i>(incorporating links from the South Somerset Sustainable Community Strategy and the Somerset Local Area Agreement)</i>	
The following Key Target areas relate to carbon reduction and climate change:	
CP 1.14	Support South Somerset Together to develop and support distinctive, balanced, local economies in South Somerset through a range of measures including the development of Transition towns with three communities meeting Transition Status by 2010
CP 2.10	Make full use of the latest development and building regulations with other advisory sources, to make sure that all development conforms to the highest feasible standards of sustainable construction by October 2010
CP 2.11	Ensure buildings that SSDC develops exceed Part L of Building Regulations from 2009/10 onwards
CP 2.13	A low carbon council adapting to climate change, measured by increasing residents' perception that SSDC leads by example in tackling climate change
CP 2.14	CO2 reduction from Local Authority operations
CP 2.18	With partners, identify options to maximize green travel by December 2009 and start one option by 2012
CP 2.19	Decrease per capita CO2 emissions in the local authority area
CP 2.20	Support SST to host a multi-agency forum including businesses by March 2009 and uses it to increase understanding for the need for Climate Change mitigation and adaptation and to agree staggered targets for reducing the District's carbon footprint year on year starting in 2010.
CP 2.21	Support SST to deliver a promotional campaign by 2010 that raises community awareness and involvement in environmental approaches and projects

CP 2.22	Support SST to deliver a campaign by 2010 aimed at local businesses, communities and individual to improve understanding of the impact of personal choices on the environment and options for 'green living'
CP 2.23	With SST partners provide a range of good practice examples that meeting the sustainability needs of residents, businesses and organisations in the District through its website and events by 2011
CP 2.24	With SST partners agree a protocol by 2010 that ensures Climate Change adaptation is embedded in all relevant decision making processes especially in the planning and delivery of services across the District.
CP 2.25	With partners, engage and educate landowners and developers of ways to mitigate flooding risk in urban and rural areas by 2010
CP 2.26	Support schemes producing electricity and heat from renewable sources and deliver, with LSP partners, three schemes by 2012
<p>Asset Management Plan</p> <p>The efficient use of council owned assets, through the following terms of reference of the Strategic Asset Management Group:</p> <ul style="list-style-type: none"> • That all property held by the Council is required for operational, social or investment purposes and links with corporate aims • A formal biennial review of the property portfolio to identify surplus / underused property and recommend appropriate action. • That adequate funding streams are identified to deal with property refurbishments, repair and maintenance, suitability and sustainability issues. • That we support shared use of premises in joint working arrangements with other public and private service providers. • 	
<p>Car Park Strategy</p> <p>Objectives 4 "Contribute to wider transport strategies relating to congestion, sustainability and the environment". Objective 5 "use tariffs to control use by time, influence modal shift and better balance the comparative costs of car and public transport."</p>	
<p>Housing Strategy</p> <p>As strategic housing authority we secure improvements to the condition of the private sector housing stock, including its thermal efficiency.</p>	

Local Development Framework

The Core Strategy 'Issues and Options' consultation document, which includes options on the degree to which the Code for Sustainable Homes, Building Research Establishment Environmental Assessment Methods (BREEAM), and the proportion of on-site renewable energy that should be required in new development. The possibility of identifying broad locations for large-scale renewable energy schemes is also raised. The current proposed adoption date of the Core Strategy is December 2010. (Dependent on adoption of the Local development scheme.)

Procurement Strategy

A recommendation to positively procure from companies with creditable, carbon reducing, green policies and from those with local supply chains through the following measures;

- Adopt a sustainability appraisal within each procurement. Central procurement will produce a sustainability appraisal document to be used in such instances. Training will be provided on the application of sustainability within procurement.
- All suppliers will be encouraged to adopt sustainable production or operating methods. SSDC will give greater sustainability marks within the tendering process to those bidders that can demonstrate a more sustainable solution compared to another.
- The Council will develop a whole life costing approach to all procurement and purchasing decisions. This will challenge the existing practice of always selecting the lowest price and establishes the connection between price and cost.
- The Council will work with suppliers to develop local supply routes and chains and try, where appropriate, to use those that have adopted best practice locally who may then go on to compete for business regionally. The Council is currently working with a number of local suppliers to encourage them to extend the companies' offer to the Council into associated services.
- The Council will work with their partner organisations to ensure that any inward investment comes to South Somerset where appropriate. Officers will work with collaborative project team's to ensure that SSDC investment in those projects, return maximum benefit for the district in jobs, infrastructure or tangible resources of any kind.
- All of the above will form a part of the total life costing culture that officers will adopt at the Council. The Council will be transparent in the way these elements are considered within any procurement process and will clearly indicate in advance how important individual elements will be in each purchase.

Somerset Local Biodiversity Action Plan

The plan seeks to minimize biodiversity loss and assist wildlife adaptation in the face of climate change through the planning system. This is achieved through consultation responses to planning applications.

Somerset Air Quality Strategy

Aim 5 objective 19 reduce CO2 emissions

This Strategy is part of the effort to improve air quality across Somerset in areas where air quality is identified as being poor. However, maintaining the good air quality that exists across most parts of the County is just as important. This strategy recognises that climate change and air quality should be integrated into local authority policy and air quality management. With many of the sources of air pollutants being the same as the sources of greenhouse gases, and in particular carbon dioxide, seeking reductions in carbon dioxide emissions from the transport sector will help minimise the pollutants responsible for the AQMAs declared across Somerset, and vice versa. Similarly, actions to reduce carbon dioxide and greenhouse emissions from the industrial and domestic sectors should, in most cases, have a beneficial effect on air quality concentrations.

Somerset Waste Partnership

Reduction of the amount of biodegradable material disposed to landfill.

Green Travel Plan

Reduce carbon emissions arising from the need to commute to work, and travel required during work time; by providing incentives to travel less and use the lowest carbon vehicle practicable.

How will the strategy be monitored?

The three aims of the strategy will be monitored at the Green Team and Management Board every six months. However the three aims will have additional performance monitoring:-

Aim One delivery (essentially the delivery plan for NI 185) will be closely scrutinised by the Carbon Management Board, which currently consists of the Strategic Director (Operations and Customer Focus), Portfolio Holder and key officers. Actions concerning 'Green Travel' will be monitored by the Green Travel Plan Board.

Aim Two delivery (essentially the corporate climate change adaptation plan, NI 188) will be monitored by the Strategic Director (Operations and Customer Focus), Assistant Director (Environment) portfolio holder and indirectly by a county-wide NI 188 working group

Aim Three delivery (essentially the delivery plan for NI 186) will be monitored by the Director (Place and Performance) Assistant Director (economy) and will be measured by NI 186.

How we will reduce our carbon emissions and adapt to climate change?

Our three Aims

One	Two	Three
<p>To become an exemplar council in reduction of carbon dioxide emissions</p> <p>Supporting NI 185</p>	<p>To adapt the council's operations to the changing climate</p> <p>Supporting NI 188</p>	<p>To ensure more sustainable communities and encourage, educate and work with partners to reduce carbon dioxide emissions</p> <p>Supporting NI 186</p>
<p>Green</p> <p>From our own estate</p> <p>From our fleet and business mileage</p> <p>Through green and ethical procurement</p>	<p>Sustainable</p> <p>Through adaptive changes in our practices to manage our own estate and provision of services</p>	<p>Intelligent</p> <p>Through our spatial planning, development management and building control</p> <p>Through working with our staff and members</p> <p>Through working with community partners</p>

AIM ONE: TO BECOME AN EXAMPLAR COUNCIL IN REDUCTION OF CARBON DIOXIDE EMISSIONS

Objective 1: To reduce the carbon emissions of our own estate by 1144 tonnes (20%) from 2007 to 2013/14

This objective supports the Corporate Plan key target areas of 2.11, 2.13, 2.14 and 2.26.

(Please note that costs in grey require funding and the associated actions will only be pursued if funding bids are successful)

Action	Responsibility	Cost £	Payback (years)	Tonnes CO ₂ saved / year	% of target	Delivered by	Status (March 2010)
1.1 Collate and report annual carbon emissions arising directly from the activities of the council (NI 185, CP 2.14)	Spatial Policy Manager	Within existing resources	-	-	-	July annually	Complete for 2007 and 2008/2009
1.2 Conduct biennial survey in 2011/12 to assess residents' perception that SSDC leads by example in tackling climate change (CP 2.13)	Climate Change Officer	Within existing resources	-	-	-	July biannually	
1.3 Update carbon reduction project list to ensure achievement of targets	Climate Change Officer (Monitored by Carbon Reduction Board)	Within existing resources	-	-	-	June annually	Complete
1.4 Develop a policy for carbon emissions of new council buildings in line with corporate plan target (CP 2.11)	Engineering & Property Manager	0	-	-	-	December 2010	
1.5 Reduce energy use at Goldenstones by altering temperatures and timings	Property Management Officer Golenstones Manager	0	-	26	2.3	April 2009	Complete
1.6 Lighting upgrades changes to temperatures and timings to reduce energy use at Goldenstones	Property Management Officer	5,000	2	22	2.0	2010	Underway
1.7 Establish Communications Plan promoting carbon awareness including creating Service Carbon Champions	Climate Change Officer	0	-	67	5.9	April 2010	Underway

Objective 1: To reduce the carbon emissions of our own estate by 1144 tonnes (20%) from 2007 to 2013/14

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(Please note that costs in grey require funding and the associated actions will only be pursued if funding bids are successful)

Action	Responsibility	Cost £	Payback (years)	Tonnes CO ₂ saved / year	% of target	Delivered by	Status (March 2010)
1.8 Install wood chip boiler if feasible at Octagon to cover base load	Property Management Officer	74,000	15	39	3.4	2011/12	Capital bid for 2011
1.9 Add water heating to above system if feasible	Property Management Officer	5,000	10	3	0.9	2012	
1.10 Install voltage optimization at Brympton Way and other SSDC buildings; Goldenstones Octagon	Property Management Officer	Brympton 30,000 Other sites yet to be costed	3	43.9 70 22	3.8 6.2 2	2010 2011 2011	Brympton capital bid for 2010
1.11 Install additional wood heat boilers subject to successful business case and carbon reductions. For example Lufton Depot (LD) or Brympton Way (BW)	Property Management Officer Climate Change Officer	LD c45,000 BW c101,000	8 44	101 39	8.8 3.4	Not known	
1.12 Install efficient insulation at Lufton depot to reduce energy use	Property Management Officer	-	-	-	-	-	Under investigation
1.13 Install 15 kW pole mounted wind turbines at Yeovil Innovation Centre (CP 2.26)	Climate Change Officer	15,973	3	16	1.4	June 2009	Complete
1.14 Investigate feasibility of further 5 – 15 kW pole mounted wind turbines at SSDC sites (CP 2.26)	Climate Change Officer	Not known	Not known	Not known	Not known	Not known	
1.15 Investigate feasibility of installing 2 MW wind turbine to offset SSDC electricity use (CP 2.26)	Climate Change Officer	Business case by end 2009	Not known	Not known	Not known	Not known	

Objective 1: To reduce the carbon emissions of our own estate by 1144 tonnes (20%) from 2007 to 2013/14

This objective supports the Corporate Plan key target areas of 2.11, 2.13, 2.14 and 2.26.

(Please note that costs in grey require funding and the associated actions will only be pursued if funding bids are successful)

Action	Responsibility	Cost £	Payback (years)	Tonnes CO ₂ saved / year	% of target	Delivered by	Status (March 2010)
1.16 Improve efficiency of cooling in server room	Property Management Officer	8,000	9	5	0.4	2011	Capital bid for 2011
1.17 Install solar shading at Brympton	Property management officer	70,000	4	92	8.2	2011	Capital bid for 2011

Objective 2: To reduce CO₂ emissions from our fleet and business mileage by 5% each year from 2008/09 to 2012/13

This objective supports the Corporate Plan key target areas of 2.13, 2.14 and 2.18.

(Please note that costs in grey require funding and the associated actions will only be pursued if funding bids are successful)

Action	Responsibility	Cost £	Payback (years)	Tonnes CO ₂ saved / year	% of target	Delivered by	Status (Nov 09)
2.1 Finalise SSDC Travel Plan by 2009/10 (CP 2.18)	Transport Strategy Officer	-	-	Tbc	Tbc	2010	
2.2 Set criteria of maximum 120 g CO ₂ / km emissions for lease cars and loans for essential car users. (CP 2.18)	Human Resouces Manager/Procurement and Risk Manager	Tbc	Tbc	15	1.3	2010	Business plan in development
2.3 Incentivise use of cars below 120 g CO ₂ / km by increasing business mileage rates and lowering rates of those above 120g CO ₂ / km. (CP 2.13)	HR Manager/Procurement and Risk Manager	Tbc	Tbc	Tbc	Tbc	Tbc	Business plan in development
2.4 Replace fleet vehicles with low carbon or alternative fuel vehicles as leases fall due for replacement. (CP 2.13)	Fleet Supervisor	Electric mega van 15,000 Econetic van 16,500	7 15	3.75 1.2	1.3 0.4	From 2010	Capital bid for econetic and one electric van 2010
2.5 Fleet driver training. (CP 2.13)	Fleet Supervisor	750	2 days	117	10.2	2010	Dates arranged
2.6 Driver training for all SSDC drivers. (CP 2.13)	Human Resouces Manager	4,500	0	13	1.1	2010	Funding not found
2.7 Develop plan to reduce corporate business mileage by 5%, 10% and 15% over three years (ensure consistent with Green Travel Plan). (CP 2.13)	Transport Officer	0	-	127	11	2012	Business plan in development
2.8 Purchase low emission pool cars for use on SSDC business. (CP 2.13)	HR Manager / Procurement & Risk Manager	6,000 – 13,000 per vehicle	Tbc	0.64 Citroen C1 10 electric	0.06-0.9 / vehicle	2010	Business plan in development
2.9 Promote green credentials of new vehicles on vehicle itself. (CP 2.13)	Fleet Supervisor	Tbc	-	-	-		

Objective 3: To reduce our CO₂ emissions from office equipment through green procurement and management

This objective supports the Corporate Plan key target areas of 1.15, 1.16 and 2.14.

(Please note that costs in grey require funding and the associated actions will only be pursued if funding bids are successful)

Action	Responsibility	Cost £	Annual Savings £	Annual CO ₂ savings (tonnes)	Payback years	% of target	Delivered by
3.0 Analyse local spend in 2009. (CP 1.16)	Procurement & Risk Manager	4.2k	4.2k	Less suppliers, less delivery miles	N/A	-	2009
3.1 Develop action plan to increase local spend % by 10% by 2012. (CP 1.15)	Procurement and Procurement Working Group	Existing resources	Reduce suppliers	Reduction on CO ₂ from road miles	N/A	-	2012
3.2 Investigate compatability of central setting of PC system standby to 30 mins with ongoing IT system (CP 2.14)	ICT Manager	1,500	2,500	To be established	-	0.3	uncertain
3.3 3.3 Research the installation of additional servers to enable thin client operation. (CP 2.14)	ICT Manager	30,000	2,400	12	13	1.0	2010
3.4 Work with office supplies company to move to 100% green or recycled products	Procurement & Risk Manager	0	0	To be determined	Immediate	-	2009
3.5 Only use local suppliers for catering operation, reduction in supply chain miles and packaging. (CP 1.15)	Catering Manager	0	Neutral	To be determined	Immediate	-	2009

AIM TWO: TO ENSURE MORE SUSTAINABLE COMMUNITIES AND ADAPT TO THE CHANGING CLIMATE

Objective 4: Ensure through adaptive changes in our practices to manage our own estate and provision of services that we respond effectively to the changing climate

This objective supports the Corporate Plan key target areas of 2.124 and is essentially the corporate Climate Change Adaptation Plan as required by NI 188)

(Please note that costs in grey require funding and the associated actions will only be pursued if funding bids are successful)

Action	Costs	Responsibility	Milestones	Delivered by	Impact	Likelihood
General Actions						
4.1 Produce a climate change adaptation plan that assesses the risk climate change poses to the local areas and sets out the actions to deal with these risks. (This strategy in response to LAA, NI 188)	Within existing resources	Climate Change Officer	Plan produced as part of this strategy. Cost the implications and report to members.	June 09 April 10	moderate	certain
4.2 Include reference to carbon reduction and climate change adaptation in all new plans and policies (supporting the actions in this strategy)	Within existing resources	Director	Corporate plan with climate change objectives.	2009	moderate	certain
4.3 Work with Heads of Service to incorporate specific targets in their service plans and balanced scorecard	Existing staff resources	Carbon Reduction Board	Carbon Reduction actions within Service Plans	March 2010	moderate	certain
4.4 Long term monitoring to respond to falling demand for car parking due to temperature extremes and increased cost of fuel.	Potential loss of income generation	Engineering and Property Services Manager	Disposal of under used assets for regeneration	Ongoing	moderate	likely

Ensure adequate store of Personal Protective Equipment to anticipate flooding events/range of climatic extremes.	Possible higher costs	Streetscene Manager	Changes to Personal Protective Equipment	Ongoing	high	likely
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Objective 4: Ensure through adaptive changes in our practices to manage our own estate and provision of services that we respond effectively to the changing climate

This objective supports the Corporate Plan key target areas of 2.124 and is essentially the corporate Climate Change Adaptation Plan as required by NI 188)

(Please note that costs in grey require funding and the associated actions will only be pursued if funding bids are successful)

Action	Costs	Responsibility	Milestones	Delivered by	Impact	Likelihood
Increased risk of wetter winters, extreme rainfall events and flooding						
4.6 Implement the statutory recommendations of the Flood and Water Bill.	Unknown – costs of actions will be added to MTFP	Environmental Health Manager	Implementation plan produced and costed and reported to members	August 2009	high	likely
4.7 Change development policies to minimise development in flood risk areas and increase flood resilience in design.	Within existing resources	DC Manager		From Oct 2010	high	likely
4.8 Encourage sustainable drainage systems and rainwater harvesting equipment for all new larger developments.	Within existing resources	DC Manager Climate Change Officer	Large developments with rainwater harvesting installed	From May 2008	moderate	likely
4.9 Minimise flooding emergencies by monitoring water levels, keeping ditches clear, managing physical structures, implementing flood alleviation works (engineering) and consulting 'downstream' committees. Use natural bank revetments, eg willow banks.	Potential increase in human resources	Countryside Manager Streetscene Manager	Response to emergencies report prepared	-	high	likely
4.10 Minimise erosion of historic landscape sites by amending management plans. (e.g. forestation	Increased staff time	Countryside Manager	Change to fauna & flora.	Ongoing	moderate	likely

of escarpments)	staff time	Manager				
4.11 Be prepared for placement of householders in temporary accommodation after initial emergency (Rest Centre) and possible placement in medium term accommodation or “permanent rehousing”.	Potential additional cost	Civil Contingencies Manager	Incidents dealt with	Ongoing	high	likely

Objective 4: Ensure through adaptive changes in our practices to manage our own estate and provision of services that we respond effectively to the changing climate

This objective supports the Corporate Plan key target areas of 2.124 and is essentially the corporate Climate Change Adaptation Plan as required by NI 188)

(Please note that costs in grey require funding and the associated actions will only be pursued if funding bids are successful)

Action	Costs	Responsibility	Milestones	Delivered by	Impact	Likelihood
4.12 Devise a strategy for providing by 2011, at a low cost, effective flood protection barriers for emergency use by residents who have been or are in danger of being flooded	Additional cost	Civil Contingencies Manager	Purchases made	2011	high	likely
4.13 Provide guidance to 150 households, landowners or developers per year via flood fairs or specific individual guidance.	Within existing resources	Civil Contingencies Manager	Guidance produced Guidance distributed	Ongoing	high	likely
4.14 Provide sandbag stores to parishes expressing an interest in housing one within 30 days of the request	Within existing resources	Civil Contingencies Manager	Each parish supplied	2009 and 2010	high	likely
4.15 Ensure that we have vehicles within our fleet that can travel through floods. (S1)	Possible financial impact on cost of replacement vehicles.	Streetscene Manager	Vehicles replaced	Ongoing	high	likely
4.16 Improve drainage at key sports pitches to prevent water and reduced use. (ASL 4)	SSDC Capital	Assistant Director (Health and Well-Being)	Each pitch improved	Ongoing	low	unlikely

		Property Services				
4.17 Increase provision of indoor sports facilities to adapt to wetter winters leading to reduced opportunities for outdoor sport. (ASL 5)	SSDC Capital	Property Services	Each improved facility	Ongoing	moderate	likely

Objective 4: Ensure through adaptive changes in our practices to manage our own estate and provision of services that we respond effectively to the changing climate

This objective supports the Corporate Plan key target areas of 2.124 and is essentially the corporate Climate Change Adaptation Plan as required by NI 188)

(Please note that costs in grey require funding and the associated actions will only be pursued if funding bids are successful)

Action	Costs	Responsibility	Milestones	Delivered by	Impact	Likelihood
Risks due to Higher Temperatures						
4.18 Reduce potential for fire at risk areas – meadows and reed beds by better signage (education of public) and fire training for staff.	Human resource training	Countryside manager	Each site improved	Ongoing	low	unlikely
4.19 Counter increased risk of pest infection at museums by monitoring, fumigation and freezing of infested material.	Staff time & training	Countryside manager	Training and advice for community museums	Ongoing	moderate	likely
4.20 Respond to water pollution, eg algae blooms, toxins washed into water-courses through monitoring to prevent incidents escalating	Maintaining equipment and staff training.	Senior countryside officer	Closer links with Environment Agency, canoe & other clubs utilising watercourses.	Ongoing	moderate	unlikely
4.21 Respond to Car Park inspector reports of melting of car park surface during hot weather	Increased use of surfacing materials	Engineering and Property Services Manager	<ul style="list-style-type: none"> Car Park inspector reports pre-empting customer complaints Adequate stores of grit and stone available to cover melted tarmac areas 	Ongoing	moderate	likely
4.22 Adapt to impact of hot weather on SSDC property by installation additional temperature	Additional funding ?	Engineering and Property	<ul style="list-style-type: none"> Measures identified 	Ongoing	moderate	likely

control measures (passive where possible) and changes in working practices. (PS 3)		Services Manager	<ul style="list-style-type: none"> Measures installed Consideration of changes to work start and finish times (lunch time siesta?) 			
4.23 Respond to prolonged higher temperatures leading to increased fire risk through fire alarm system maintenance. (PS 7)	Within existing resources	Engineering and Property Services Manager	Regular maintenance	Ongoing	high	likely

Objective 4: Ensure through adaptive changes in our practices to manage our own estate and provision of services that we respond effectively to the changing climate

This objective supports the Corporate Plan key target areas of 2.124 and is essentially the corporate Climate Change Adaptation Plan as required by NI 188)
(Please note that costs in grey require funding and the associated actions will only be pursued if funding bids are successful)

Action	Costs	Responsibility	Milestones	Delivered by	Impact	Likelihood
4.24 Plant shade trees in appropriate urban areas, on land we manage, and encourage developers to do the same	Within existing resources	Streetscene Manager, DC officers	Increase tree cover on public land by 5%	Dec 2018	low	likely
4.25 Ensure staff are not exposed to working conditions when heatstroke could occur	Within existing resources	All Managers	Changes to working hours to avoid hottest part of day	When required	moderate	unlikely
4.26 Avoid planting of coniferous and evergreen species to avoid increasing fire risk	Within existing resources	Streetscene Manager	Planting schemes planned	Ongoing	high	likely
Opportunities due to higher temperatures						
4.27 Re-focus marketing plans to attract tourists and visitors according to short-term trends.	Increased pressure on path maintenance costs	Community Health and Leisure Manager	More income from special events. South Somerset as a stronger short-break destination	Ongoing	moderate	certain

4.28 Promote South Somerset to entrepreneurs, businesses, and visitors due to more attractive environment.	Within existing resources but specialist expertise where required	Economic Development Team Leader	Promotional materials published	Ongoing	moderate	certain
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Objective 4: Ensure through adaptive changes in our practices to manage our own estate and provision of services that we respond effectively to the changing climate

This objective supports the Corporate Plan key target areas of 2.124 and is essentially the corporate Climate Change Adaptation Plan as required by NI 188)

Action	Costs	Responsibility	Milestones	Delivered by	Impact	Likelihood
4.29 Take advantage of expected increase in sunshine hours with greater use of passive solar gain, solar thermal and photovoltaic panels.	Marginal cost in subsidy required to achieve design features. Additional maintenance cost on RSL – justifying higher rent because lower running cost?	Housing and welfare Manager	Reduced energy bills for occupants	As opportunities arise	moderate	likely
4.30 Ensure adequate response to expected increase in enquiries related to licensing of more outdoor events, street cafes, gatherings outside pubs etc.	Additional resource required	Community Health and Leisure Manager	Noticeable increase in events licensed	Ongoing	moderate	likely

pubs etc.						
4.31 Ensure adequate response to expected increase in enquiries related to caravan and camp sites due to increase in holidays taken in the UK.	Within existing resources	Community Health and Leisure Manager	Noticeable increase in enquiries	Ongoing	moderate	likely
Risks due to shorter winters						
4.32 Respond to changes to growing season and adapt vegetation cutting programmes.	Potential rise in staff / fuel consumption	Senior countryside officer	Modified cutting programme	Ongoing	moderate	likely
<p>Objective 4: Ensure through adaptive changes in our practices to manage our own estate and provision of services that we respond effectively to the changing climate</p> <p>This objective supports the Corporate Plan key target areas of 2.124 and is essentially the corporate Climate Change Adaptation Plan as required by NI 188)</p>						
Action	Costs	Responsibility	Milestones	Delivered by	Impact	Likelihood
4.33 Adapt pest and disease controls to take account of changed species encountered due to wetter warmer summers. (S8)	Possible staff retraining	Streetscene Manager	Each new control adopted	Ongoing	moderate	likely
4.34 Liaise with Highways Authority to increase herbicide applications to cope with increased disintegration of highway and increased weed growth.	Cost & time implications of increasing herbicide applications	Streetscene Manager	Increase in road disintegration identified Planned increase in herbicide applications	Ongoing	low	likely
Risk of drier summers / drought						
4.35 Increase in regularity of tree safety surveys and level of arboricultural intervention to respond to increased risk of summer limb drop and general instability of tree stock.	Increased staff time and training.	Streetscene / Countryside Managers	Additional surveys within work plan	Ongoing	medium	likely
4.36 Monitor buildings for ground movement and cracking following prolonged periods of drought.	Insurance	Engineering and Property Services Manager	Ground movement identified	Ongoing	high	unlikely

4.37 Ensure low water use design to build in resilience to future water shortages and reduce risk of higher water bills.	Marginal increase in subsidy to achieve design standard	Housing and Welfare Manager	Rainwater harvesting to supply toilets installed	As opportunities arise	high	likely
4.38 Installation of rainwater harvesting at public buildings including Public Conveniences where roof areas make this practical.	Funding	Engineering and Property Services Manager	<ul style="list-style-type: none"> Sites for installation identified Review viability for supply to toilets at Brympton Way Installations complete 	2009	high	likely

Objective 4: Ensure through adaptive changes in our practices to manage our own estate and provision of services that we respond effectively to the changing climate

This objective supports the Corporate Plan key target areas of 2.124 and is essentially the corporate Climate Change Adaptation Plan as required by NI 188)

Action	Costs	Responsibility	Milestones	Delivered by	Impact	Likelihood
4.39 Increase synthetic sports pitch provision to cope with expected hard dry pitches during hotter summers.	External pitch tenders SSDC Capital	Assistant Director (Health and Well-Being) Property Services	Sites identified	Ongoing	low	likely
Risks due to regular climate extremes						
4.40 Respond to increased accelerated degradation of external surfaces by more frequent repainting and consideration of alternative finishes.	Additional funding ?	Head of Property Services	Surfaces requiring treatment identified	Ongoing	low	likely
4.41 Maintain surface quality and path access to parks, play areas and youth facilities in response water logging, freeze/thaw and cracking , prolonged heat and melting through phased improvement in paths.	Capital bids	Assistant Director (Health and Well-Being)	<ul style="list-style-type: none"> Sites prioritized according to need Guidance for provision resulting from new housing development 	Ongoing	low	likely

4.42 Review temperature tolerances of equipment installed at play areas etc.		Assistant Director (Health and Well-Being)	No equipment failure incidents	Ongoing	low	unlikely
4.43 Monitor, adjust and replace temperature control equipment as required to maintain comfort in publicly used buildings.	Potential to reduce heating bills and increase air conditioning bills	Assistant Director (Health and Well-Being) Property Services	Passive Ventilation systems installed	Ongoing	moderate	likely

Objective 4: Ensure through adaptive changes in our practices to manage our own estate and provision of services that we respond effectively to the changing climate

This objective supports the Corporate Plan key target areas of 2.124 and is essentially the corporate Climate Change Adaptation Plan as required by NI 188)

Action	Costs	Responsibility	Milestones	Delivered by	Impact	Likelihood
Action to address Biodiversity issues resulting from climate change						
4.44 Seek to ensure development proposals allow for wildlife adaptation consistent with the Local Biodiversity Action Plan and climate change objectives.	Within existing resources	DC Manager and Ecologist	Increase in wildlife corridors linking sustainable habitats	Ongoing	moderate	likely
4.45 Continue to provide advice - to those that request it -on management of habitat, trees and wildlife that takes climate change into account, in accordance with the LBAP (Local Biodiversity Action Plan).	Within existing resources	District Ecologist	Contribution towards LBAP targets Trees suitable for late 21 st century climate planted on new developments and council managed land	Ongoing	moderate	likely
4.46 Adapt mowing regime to take account of changing species composition. (S6)	Some admin impact	Streetscene Manager	Re landscape if required	Ongoing	moderate	likely
4.47 Plant drought resistant and suitable exotic species adapted to changed weather patterns. (S7)	Manpower resource and plant costs	Streetscene Manager	Re landscape if required	Ongoing	moderate	likely

Actions to address risks to public health with changing climate						
4.48 Greater vigilance and provision of advice in expectation that infectious diseases such as Legionella (air cond), new diseases (eg, malaria) and exotic insects will be encountered more frequently with warmer climate. (EH 1 & 7)	Within existing resources	Community Health and Leisure Manager	Closer liaison with PCT / HPA Staff more aware of new pests	Ongoing	high	likely
4.49 Ensure adequate response to expected increase in enquiries related to private water supply due to occasional flooding, reduced summer supply and potential for contamination. (EH 3)	Within existing resources	Community Health and Leisure Manager	Noticeable increase in enquiries	Ongoing	high	likely
Objective 4: Ensure through adaptive changes in our practices to manage our own estate and provision of services that we respond effectively to the changing climate						
This objective supports the Corporate Plan key target areas of 2.124 and is essentially the corporate Climate Change Adaptation Plan						
Action	Costs	Responsibility	Milestones	Delivered by	Impact	Likelihood
4.50 Greater vigilance inspecting swimming pools and checking water.	Within existing resources	Community Health and Leisure Manager	No reported incidents of poor water quality	Ongoing	low	unlikely
4.51 Ensure adequate response to expected increase in enquiries about condensation and mould due to wetter warmer winters and overheating during prolonged hot weather.	Within existing resources	Environmental Health Manager	<ul style="list-style-type: none"> Increased number of insulation grants More advice given about ventilation systems (passive and heat recovery) More advice given about solar shading including window shutters 	Ongoing	low	unlikely
4.52 Revise conditions for licensing for boarding and breeding animals as necessary. (EH 5)	Within existing resources	Environmental Health Manager	Review of licensing conditions	Ongoing	low	unlikely
4.53 Revise guidance on food safety to reduce	Within	Environmental	<ul style="list-style-type: none"> Closer link with food hygiene 	Ongoing	high	likely

potential for food poisoning related to higher temperatures. (EH 6)	existing resources	Health Manager	training courses <ul style="list-style-type: none"> • Revised guidance on food safety. • Additional temperature checks. • More SFBB training 			
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AIM THREE: TO ENSURE MORE SUSTAINABLE COMMUNITIES AND ENCOURAGE, EDUCATE AND WORK WITH PARTNERS TO REDUCE CARBON DIOXIDE EMISSIONS

Objective 5: Ensure through spatial planning, development management and building control that medium and large scale planning application includes sustainable construction, microgeneration and water saving measures by 2012

This objective supports the Corporate Plan key target areas of 2.10, 2.13 and 2.19.

Action	Costs	Responsibility	Milestones	Delivered by
5.1 Integration of Code for Sustainable Homes, Code for non domestic buildings (when it is published) and an extension of the councils Renewable Energy Requirement policy within our LDF. (CP 2.10)	Within existing resources	Spatial Policy Manager / Climate Change Officer	Code Level 3 2010 Code Level 4 2013 Code Level 6 2016	2010
5.2 Provide simple guidance on the above for homeowners and developers. (CP 2.13)		Climate Change Officer		2010
5.3 Ensure where possible that development is orientated to maximise solar energy. (CP 2.19)	Within existing resources	DC Manager	Include solar orientation within LDF design policy.	From Oct 2010
5.4 Encourage additional insulation in existing buildings during building works via building control officer advice. (CP 2.19)	Within existing resources	Building Control Manager		Ongoing
5.5 Promote medium (50 kW - 10 MW) renewable energy schemes to meet South Somerset contribution to the RSS renewables target of 61 - 81 MWe for Somerset by 2010. (CP 2.13, 2.19)	Within existing resources	Spatial Policy Manager	Policies detailing strategic renewable resource sites as core policy within LDF	Oct 2010

Objective 5: Ensure through spatial planning, development management and building control that medium and large scale planning application includes sustainable construction, microgeneration and water saving measures by 2012

This objective supports the Corporate Plan key target areas of 2.10, 2.13 and 2.19.

Action	Costs	Responsibility	Milestones	Delivered by
by 2010. (CP 2.13, 2.19)				
5.6 Encourage developers to enter award schemes for exemplar local sustainable buildings. (CP 2.13)	Within existing resources	DC Manager	DC Officers made aware of and promote suitable award schemes	From May 2008
5.7 Encourage developers to offer incentives to promote transport alternatives to the car from the outset for new developments.	Within existing resources	DC Manager	Planning Obligation Guidance note	April 2009
5.8 Investigate feasibility of extension of dedicated cycle routes	tbc	Spatial Policy Manager	Incorporation in Local Development Framework	Ongoing
5.9 Seek to promote cycling in new developments; eg by cycle storage and dedicated cycle ways	Within existing resources	Spatial Policy Manager / DC Manager	Incorporation in Local Development Framework	Ongoing

Objective 6: To reduce carbon emissions arising from personal choices both at home and at work through working with our staff and members

This objective supports the Corporate Plan key target areas of 2.13, 2.14 and 2.22

Action	Costs	Responsibility	Milestones	Delivered by
6.1 Deliver an environmental awareness programme aligned to SST campaign in the museum and at countryside events attended by at least 500 people per year. (CP 2.13)	Existing staff resources	Countryside Manager, Arts and Entertainment Manager		
6.2 Produce 6 case studies each year to present to SST	Existing staff	Climate Change		

Objective 6: To reduce carbon emissions arising from personal choices both at home and at work **through working with our staff and members**

This objective supports the Corporate Plan key target areas of 2.13, 2.14 and 2.22

Action	Costs	Responsibility	Milestones	Delivered by
for their campaign to improve understanding of personal choices on the environment. (CP 2.13)	resources	Officer		
6.3 Hold regular carbon reduction awareness events for all staff and members. (CP 2.14)	Existing staff resources	Climate Change Officer	Engagement of staff at all SSDC centres of operation	Every 12 months
6.4 Use InSite to give staff regular "bite size" energy information. (CP 2.14)	Existing staff resources	Communications officer	Measurable reduction in electricity use	Every month
6.5 Include carbon reduction awareness training for new employees within initial manager's initiation checklist. (CP 2.14)	Existing staff resources	Human Resources Manager	All new staff aware of their carbon reduction responsibilities	Feb 09
6.6 Include carbon reduction awareness responsibilities within all SSDC job descriptions. (CP 2.14)	Existing staff resources	Human Resources Manager	Job descriptions updated	March 2010
6.7 Ensure carbon reduction and climate change adaptation is included in all corporate strategies.	Climate Change Officer	Management Board		From Sept 2009 onwards
6.8 Combine Programme Boards of Carbon Management and Green Travel Plan to one Green Board	Existing staff resources	Director, Portfolio Holder	Single Board established	2010

Objective 7: To reduce carbon emissions **through working with the community and partners**

This objective supports the Corporate Plan key target areas of 1.14, 2.15, 2.16, 2.17, 2.18, 2.19, 2.20, 2.21, 2.22, 2.23 and 2.25

Action	Costs	Responsibility	Milestones	Delivered by
7.1 Support the creation of 3 transition towns by 2012, committing to relocalising food, energy, transport and	Existing staff resources	Climate Change Officer, Area	Groups established	2012

Objective 7: To reduce carbon emissions through working with the community and partners

This objective supports the Corporate Plan key target areas of 1.14, 2.15, 2.16, 2.17, 2.18, 2.19, 2.20, 2.21, 2.22, 2.23 and 2.25

Action	Costs	Responsibility	Milestones	Delivered by
their economies. (CP 2.14)	resources	Development Teams		
7.2 Develop District Travel Plan with partners and develop 1 joint option by 2011/12. (CP 2.18)	Existing staff resources	Transport Strategy Officer	Completed plan	2012
7.3 SSDC to provide 8 working days support and advice on mitigation and adaption measures to the public/private sector carbon reduction forum before the end of 2010/11. (CP 2.20)	Existing staff resources	Climate Change Officer		Dec 2011
7.4 SWP to complete Somerset Waste Minimisation Strategy by summer 2009 with agreed targets for South Somerset to reduce residual waste and increasing the % recycled.	Existing staff resources	Strategy Officer	Evidence of increased recycling rates	2009
7.5 SWP to appoint an officer in 2009/10 to raise awareness of existing services and promote new services for business recycling. (CP 2.19)	?	?	?	2010
7.6 Extend garden waste collection district wide if feasible.	£23,000	Director SWP	Report to DX, August 09	October 09
7.7 Work with Somerset Waste Partnership and other partners to encourage installation of CHP anaerobic digestion plant at locations close to the consumer.	Existing staff resources	Climate Change Officer	New plant installed	Dependent on partner engagement
7.8 Provide advice to householders about home insulation and other energy efficiency measures including grants available. (CP 2.19)	Existing staff resources	HECA Officer Building Control Development Control	Annual report detailing reductions in household energy use in the district	Annually
7.9 Complete installation of hydropower at 2 more sites in the first tranche. (CP 2.19)	Met by grants already achieved and site owners	Climate Change Officer, South Somerset	300 MWh/yr renewably generated electricity	Dec 2009

Objective 7: To reduce carbon emissions through working with the community and partners

This objective supports the Corporate Plan key target areas of 1.14, 2.15, 2.16, 2.17, 2.18, 2.19, 2.20, 2.21, 2.22, 2.23 and 2.25

Action	Costs	Responsibility	Milestones	Delivered by
		Hydropower Group		
7.10 Develop a clear program of schemes for a second tranche of site owners. (CP 2.19)	External grant funding to be applied for	Climate Change Officer, South Somerset Hydropower Group	Second tranche of site owners engaged with site development	Dependent on owners engagement
7.11 Increase tree cover throughout the district by encouraging planting on privately owned land.	External funding to be applied for	Landscape officer, Tree Wardens, landowners, Somerset County Council, Forestry Commission	Tree cover in the district increased by 1%	Dec 2012
7.12 Develop partnerships to establish multi-functional community woodlands.	External funding to be applied for	Tree planting officer, Somerset County Council, Local communities	A minimum of 2 Community woodlands	Dec 2010
7.13 Encourage good practice management of privately owned woodland to maximise working coppice and wood chip production.	Within existing resources	Tree Planting Officer, Countryside and Streetscene staff	Advice given to 10 landowners per year	Ongoing
7.14 Examine ways in which this strategy might be supported via the SSDC grant programme.	Existing staff resources	Voluntary Sector Development Officer	£ of grants given that are to carbon reduction projects.	Dec 2011
7.15 Investigate feasibility of introducing business rate rebates for excellent practice in business energy efficiency.	Within existing resources	Head of Revenues and Benefits	Report written	Dec 2010

Objective 7: To reduce carbon emissions through working with the community and partners

This objective supports the Corporate Plan key target areas of 1.14, 2.15, 2.16, 2.17, 2.18, 2.19, 2.20, 2.21, 2.22, 2.23 and 2.25

Action	Costs	Responsibility	Milestones	Delivered by
7.16 Encourage and support others in South Somerset to produce own travel plans in consultation with bus companies, car clubs and the community. (CP 2.19)	Existing staff resources	Transport Strategy Officer	Scope Sept 2008	Dec 2010
7.17 Regularly update our website and InSite to include carbon reduction news. (CP 2.13)	Existing staff resources	Climate Change Officer, Communications Officer	New material on website and InSite	Continually
7.18 Work with partners such as Ecos Trust and others to ensure “best practice” in all endeavours associated with sustainable construction (CP 2.19)	Existing staff resources	Climate Change Officer	Jointly arranged events	Continually

Appendix 1

Our past and current carbon dioxide emissions

Electricity use from our largest buildings (carbon emissions not taking into account purchase of green electricity)										
Site	Analysis	Period								
		1999-2000	2000-2001	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009
Churchfield	kWh/Annum	61,745	41,941	74,646	63,482	49,583	48,678	48,194	50,445	85054
Brympton Way		686,212	684,293	582,875	629,400	648,845	695,202	771,118	685,185	640051
Lace Mill		108,801	107,138	68,383	23,622	96,098	40,014	34,396	37,441	77324
Petters House		135,854	136,147	122,467	107,095	121,180	136,037	131,557	131,251	187930
Kelways		77,183	70,651	73,205	59,267	62,995	58,689	55,024	55,045	53982
Goldenstones				697,862	753,660	788,832	738,964	794,725	832,749	762163
Octagon				207,509	233,567	244,303	346,392	266,519	258,421	280439
Lufton				138,388	166,105	292,555	301,304	253,760	252,312	295814
Totals				1,965,335	2,036,198	2,304,391	2,365,280	2,355,293	2,302,849	2,382,757
Totals		Tonnes CO ₂ /annum ¹		1,116	1,156	1,308	1,343	1,337	1,237	1,279

Gas use from our largest buildings										
Site	Analysis	Period								
				2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009
Churchfield	kWh/Annum			171,964	116,195	92,573	108,907	102,891	106,211	110,947
Brympton Way				227,442	153,445	177,311	325,158	317,408	232,031	222,042
Lace Mill				185,315	119,259	117,242	138,345	95,829	132,977	127,791
Kelways				135,541	197,997	131,798	167,636	143,544	102,019	137,096
Goldenstones				1,540,498	1,549,431	1,815,727	1,751,400	1,977,516	1,973,604	1,796,947
Octagon				208,438	251,453	294,839	253,075	224,508	203,150	307,093
Totals				2,469,198	2,387,780	2,629,490	2,744,521	2,861,696	2,749,992	2,701,916
Totals		Tonnes CO ₂ /annum ²		479	463	510	532	555	543	518

Car mileage from our business use					2004-2005	2005-2006	2006-2007	2007-2008	2008-2009
	Miles				764,033	754,179	776,532	644,158	609,671
	Tonnes CO ₂ /annum ³				251	248	255	215	200

Fuel use by our fleet vehicles					2004-2005	2005-2006	2006-2007	2007-2008	2008-2009
diesel	litres/annum				397,568	387,790	387,085		
gas oil	litres/annum				43,398	45,849	49,224		
	Tonnes CO ₂ /annum ⁴				1181	1162	1169	1051	1302

Based on 0.568 kg CO₂/kWhr ¹

Based on 0.194 kg CO₂/kWhr ²

Based on average 1600 cc, 40 mpg and petrol 2.315 kg CO₂ / litre petrol ³

Based on 2.68 kg CO₂/litre diesel ⁴

1 gallon = 4.55 litres

Appendix 2

Comparison of carbon emissions from council buildings; 2007 baseline with 2008/2009

		2007	2008/09	2007	2008/09
		kWh	kWh	CO2 kg/y	CO2 kg/y
80 South Street, Yeovil	Electricity (grid)	26,740	32,680	14,359	17,549.16
Area West, Car Park Lighting	Electricity (grid)	73,976	73,976	39,725	39,725.11
Athletics Arena, (Floodlights) Recreation Ground	Electricity (grid)	5,219	4,250	2,803	2,282.25
Athletics Arena, Yeovil	Electricity (grid)	480	89	258	47.79
Bath Street, CP Chard	Electricity (grid)	876	876	470	470.41
Brympton Way, Yeovil	Electricity (grid)	685,185	640,051	367,944	343,707.39
Car Park & Lighting, Ilminster & Chard	Electricity (grid)	2,516	2,516	1,351	1,351.09
Car Park Lighting, Wincanton Area (Continuous)	Electricity (grid)	18	18	10	9.67
Car Park Lighting, Wincanton Area (Dusk to Dawn)	Electricity (grid)	1,170	1,170	628	628.29
SWP Offices	Electricity (grid)	16,195	36,252	8,697	19,467.32
SWP May Gurney Depot	Electricity (grid)	no data	57,749	no data	31,011.21
Cemetery Chapels	Electricity (grid)	460	1,198	247	643.33
Cemetery Lodge	Electricity (grid)	3,408	2,007	1,830	1,077.76
Cemetery Mortuary	Electricity (grid)	2,550	4,420	1,369	2,373.54
Churchfields, Wincanton	Electricity (grid)	50,445	85,054	27,089	45,674.00
Communal Supply, Dorcus House, Yeovil	Electricity (grid)	24,458	15,693	13,134	8,427.14
Council Offices, Ilminster	Electricity (grid)	7,293	6,459	3,916	3,468.48
Crematorium	Electricity (grid)	94,250	78,796	50,612	42,313.45
Day Nursery, Yeovil	Electricity (grid)	36,909	35,913	19,820	19,285.28
Dovecot Building Unit 2, Bruton	Electricity (grid)	2,613	10,299	1,403	5,530.56
Dovecot Building Unit 3, Bruton	Electricity (grid)	1,465	3,906	787	2,097.52
Dovecott Building, High Street, Bruton (Comm'ty Office)	Electricity (grid)	2,563	2,244	1,376	1,205.03
Electronic Signs & Heaters, Yeovil	Electricity (grid)	11,824	11,824	6,349	6,349.49
Flax Mills, Torbay Road, Castle Cary (Communal Areas)	Electricity (grid)	926	889	497	477.39
Goldenstones, Yeovil	Electricity (grid)	832,749	762,163	447,186	409,281.53
Gypsy/Traveller Site, Chubbards Cross, Ilton	Electricity (grid)	81,921	70,444	43,992	37,828.43
Langport Visitors Centre, Langport	Electricity (grid)	3,849	5,269	2,067	2,829.45

Lighting, Unicorn Car Park, Somerton	Electricity (grid)	8,968	8,968	4,816	4,815.82
Lufton Depot, Yeovil	Electricity (grid)	252,312	295,814	135,492	158,852.12
Market Place, Castle Cary (SSDC Office/Ground Floor)	Electricity (grid)	7,782	13,117	4,179	7,043.83
Milford Hall & PC's, Yeovil	Electricity (grid)	2,930	604	1,573	324.35
Museum of South Somerset & TIC, Yeovil	Electricity (grid)	23,538	24,971	12,640	13,409.43
Octagon Theatre, Yeovil	Electricity (grid)	258,421	280,439	138,772	150,595.74
Old Kellaways, Langport	Electricity (grid)	55,045	53,982	29,559	28,988.33
Old Lace Mill, Chard	Electricity (grid)	37,441	77,324	20,106	41,522.99
Old Stable Block/Stores. Churchfields, Wincanton	Electricity (grid)	1,630	2,813	875	1,510.58
Parish Rooms, Somerton (1)	Electricity (grid)	8,727	3,550	4,686	1,906.35
Parish Rooms, Somerton (2)	Electricity (grid)	no data	4,577	no data	2,457.85
Pavilion Changing Rooms, Yeovil	Electricity (grid)	33,314	39,170	17,890	21,034.29
PCs Bath Street, Chard	Electricity (grid)	9,702	12,499	5,210	6,711.96
PCs Boden Street, Chard	Electricity (grid)	3,736	6,254	2,006	3,358.40
PCs Bus Station (Gents) Yeovil	Electricity (grid)	5,103	4,148	2,740	2,227.48
PCs Bus Station (Ladies) Yeovil	Electricity (grid)	15,077	4,481	8,096	2,406.30
PCs Falkland Square/South Street, Crewkerne	Electricity (grid)	6,265	8,778	3,364	4,713.79
PCs Free Street, Ilchester	Electricity (grid)	2,342	2,951	1,258	1,584.69
PCs Grove Alley, Bruton	Electricity (grid)	3,875	1,896	2,081	1,018.15
PCs London Road, Milborne Port	Electricity (grid)	2,668	2,871	1,433	1,541.73
PCs Market Square, Ilminster	Electricity (grid)	1,179	Removed	633	removed
PCs Memorial, High Street, Wincanton	Electricity (grid)	4,526	2,826	2,430	1,517.56
PCs Millbrooke Gardens, Castle Cary	Electricity (grid)	6,365	7,418	3,418	3,983.47
PCs Prigg Lane, South Petherton	Electricity (grid)	3,107	6,418	1,668	3,446.47
PCs West Street, Somerton	Electricity (grid)	4,292	5,474	2,305	2,939.54
PCs West Street, Stoke Sub Hamdon	Electricity (grid)	16,115	7,191	8,654	3,861.57
PCs Whatley Car Park, Langport	Electricity (grid)	1,723	2,005	925	1,076.69
Petters House, Yeovil	Electricity (grid)	131,251	187,930	70,482	100,918.41
Petters Way Car Park, Yeovil	Electricity (grid)	no data	3,754	no data	2,015.90
Pumping Station, Lufton, Yeovil	Electricity (grid)	5,791	5,061	3,110	2,717.76
Rangers Hut at Goldenstones, Yeovil	Electricity (grid)	2,427	2,213	1,303	1,188.38
Rangers Station & PC's, Ham Hill	Electricity (grid)	13,496	14,094	7,247	7,568.48
Resource Centre, Garret Road, Yeovil	Electricity (grid)	47,771	77,643	25,653	41,694.29
Shudrick Lane & Abbey Street CP (Dusk to Dawn)	Electricity (grid)	25,381	25,381	13,630	13,629.60
Shudrick Lane & Abbey Street CP (Half Night & Pre-dawn)	Electricity (grid)	1,309	1,209	703	649.23

Sports Pavillion, Turners Barn Lane, Yeovil	Electricity (grid)	1,912	1,052	1,027	564.92
St Micheals Hall, Yeovil	Electricity (grid)	8,157	9,175	4,380	4,926.98
Tintinhull Transit Camp	Electricity (grid)	56,665	77,307	30,429	41,513.86
Waste Disposal Site, Sunningdale, Yeovil	Electricity (grid)	27,452	40,291	14,742	21,636.27
Waste Disposal Site, Torbay Road, Castle Cary	Electricity (grid)	2,188	2,375	1,175	1,275.38
West Hendford Car Park, Yeovil	Electricity (grid)	no data	35,141	No data	18,870.72
Whatley Car Park, Langport	Electricity (grid)	5,961	5,961	3,201	3,201.06
	Totals	3,076,002	3,315,331	1,651,813	887,023.62
	HEAT				
Boden Centre, Boden Street, Chard	Natural gas	67,769	76,371	12,537	14,128.64
Cemetery Lodge	Natural gas	33,250	29,665	6,151	5,488.03
Council Offices, Brympton Way, Yeovil	Natural gas	232,031	222,042	42,926	41,077.77
Council Offices, Churchfields, Wincanton	Natural gas	106,211	110,947	19,649	20,525.20
Council Offices, North Street, Ilminster	Natural gas	8,300	25,767	1,536	4,766.90
Council Offices, Old Kelways, Langport	Natural gas	102,019	137,096	18,874	25,362.76
Crematorium, Bunford Lane, Yeovil	Natural gas	1,234,353	1,176,547	228,355	217,661.20
Goldenstones, Brunswick Street, Yeovil	Natural gas	1,973,604	1,796,947	365,117	332,435.20
JOD Pavilion Changing Rooms, Yeovil	Natural gas	75,349	105,253	13,940	19,471.81
Lufton Depot (Workshops)	Burning oil	88,000	75,998	21,560	18,619.51
Millford Hall, Yeovil	Natural gas	70,608	33,869	13,062	6,265.77
Museum of South Somerset	Burning oil	60,000	61,212	14,700	14,996.94
Octagon Theatre	Burning oil	203,150	307,093	49,772	75,237.79
Resource Centre	Burning oil	98,723	10,279	24,187	2,518.36
St Michaels, Hall, Yeovil	Natural gas	71,181	73,038	13,168	13,512.03
Work Place Nursery, Yeovil	Natural gas	63,746	130,695	11,793	24,178.58
Lufton Depot (Poly Tunnels)	LPG	60,384	98,134	12,922	21,000.68
Council Offices, Lace Mill, Chard	Natural gas	132,977	127,791	24,601	23,641.34
	Totals	4,681,655	4,598,744	894,850	880,888.45
	Grand Totals	7,757,657	7,914,075	2,546,663	1,767,912.07

Comparison of Carbon Emissions from Council Transport 2007 and 2008/2009

	2007	2009/2009
Business	212	200
Fleet	2,871	1,501