# Climate Change Working Group

# Annual Report 2008/09



South Cambridgeshire District Council

September 2009

# Introduction

This is the second annual report of the Council's Climate Change Working Group. In considering the format for this year, Members were anxious that the report do more than simply list the elements of the ground they have covered over the 12 months of 2008/09. The urgency and imperatives of the climate change agenda are now so serious that there is little time for gentle reflection. It was felt that it is now more important than ever to pick up and push forward and that the Annual Report to Council should reflect this position<sup>1</sup>. The approach adopted over the following sections is a more narrative one: drawing upon the year's evidence collection and deliberation to emphasise how the focus of the Council's approach is changing to become more:

- integrated for example, through stronger Local Strategic Partnership and other partner links;
- comprehensive cross-cutting all service areas and aspects of life in South Cambridgeshire;
- tailored to local circumstances and the concerns of residents;
- progressive pressing on from the limitations of passive awareness-raising to more active local engagement and delivery on the ground, and;
- tangible, as new indicators and targets make tackling climate change a more approachable and more readily grasped task.

The period 2008/09 can be viewed as the year in which the feet of local councils' across the country touched bottom in the depths of what was required of them in effectively tackling climate change. The water was deep, but not enough to drown in. Baselines were established and firmer footings secured. It was a crucial period that now stands as the point of departure for the next two to five years which, from the global to the local and back again, will be pivotal to an effective response to the climate change agenda.

<sup>&</sup>lt;sup>1</sup> For reference, a summary listing of the items considered by the Working Group over their 6 formal and 2 informal meetings can be found in the Appendix at the end of this report – with full background papers and minutes available through the usual Democratic Services and on-line channels.

This report will inevitably include some itemisation of the authority's activities in this field under the direction of Council, Cabinet, portfolio holder and the advice and guidance of the Working Group. This will, however, be in the context of changing approaches as outlined above. Approaches designed to highlight, manage and deliver against what is probably the greatest challenge of the modern era, i.e. to simultaneously:

- dramatically reduce atmospheric concentrations of carbon dioxide and other greenhouse gases;
- rapidly manage the transition from fossil fuel based energy supply to one that is secure, affordable and sustainable, and;
- make sure that we are prepared for and adapting to the levels of climate change to which we are already committed.

The following section revisits the background to the climate change conundrum – Members already familiar with this may wish to skip forward to the next section.

# Background: the problem with climate change

The climate change agenda is more than a future challenge it is a real and present danger – for us all today and generations to come. The consensus of scientists from over 130 countries is now overwhelming: human activities are causing global climate change<sup>2</sup>. Human action has increased CO<sub>2</sub> concentrations by 35% since pre-industrial times (CO<sub>2</sub> being the main greenhouse gas) and global temperatures are now 0.74°C higher than 100 years ago. The weather may continue to look variable, and in the UK our weather patterns often make it hard to see a clear thread of 'change', but the scientific evidence remains robust – on the current trajectory the climate is changing towards a warmer world at a rate that the ecosystems and socio-economic arrangements upon which we all depend will not be able cope with. Beyond a 2°C increase in global temperatures above pre-industrial levels is considered especially 'dangerous' – a threshold beyond which changes to ecosystems may well 'tip' past a point where the control of CO<sub>2</sub> concentrations no longer remains in our control. To head this off, global emissions will, at minimum, need to peak by around 2016 and then decrease year on year by at least 3-4%. This should deliver a global reduction in emissions of over 50% by 2050 (which for developed nations such as ours equates to a reduction of at least 80%).

Despite these physical realities and scientifically supported predictions, the motivating of an effective global response is proving a mammoth challenge. The remedy is clear to see – reduce our greenhouse gas emissions down to level where they no longer threaten to change our climate to a far less tolerable state. Acting on this to the scale required is more than hard for a range of reasons: climate change is not that obviously detectable against the hubbub of

<sup>&</sup>lt;sup>2</sup> Intergovernmental Panel on Climate Change, 2007, Fourth Assessment Report

everyday life; uncertainty remains over the extent of the impacts and when they will have greatest effect (there is even an indication that some 'natural' processes may suppress this warming affect for the next five to ten years but, if true, this only means that it will hit harder once the masking effect fades); responses tend to sit uncomfortably with the conventional model of economic growth and its vested interests; there is a big upfront cost attached to comprehensively moving away from fossil fuels and developing alternative sources; it is a global problem requiring individual action and responsibility; the benefits of change today will not be felt for many years to come and possibly not by those that made the changes; there seem to be other more immediate problems; and the list goes on. This has meant that tackling the 'inconvenient truth' of climate change or what Sir Nicholas Stern refers to as "the greatest market failure the world has ever seen"<sup>3</sup> has been difficult to grasp and has become beset by procrastination and circular arguments along the lines of 'I will if you will'.

Things are changing however. The Climate Summit in Copenhagen this December will be looking to establish new agreements on global and international reductions in greenhouse gas emissions and the conservation of 'carbon sinks' (e.g. forests and woodland). World leaders are showing more commitment to tackling climate change. The past 12 months have seen big strides taken in UK policy with cross-party support. The landmark Climate Change Act (2008) has set present and future governments the target of reducing our carbon emissions by 80% by 2050. This activity has included a strengthening of responsibility and accountability downward to local councils – "the Government wants to encourage and empower local authorities to take additional action in tackling climate change...It believes that people should increasingly be able to look to their local authority not only to provide established services, but also to co-ordinate, tailor and drive the development of a low carbon economy in their area, in a way that suits their preferences".<sup>4</sup>

# Where are we now?

There are two principle facets to the climate change agenda. The first is referred to as 'mitigation' and covers the means by which we can stabilise (and probably need to reduce) the current concentration of greenhouse gases in the atmosphere. The second is referred to as 'adaptation' and covers the steps we take to ensure that we are prepared for the negative impacts of the weather related events to which the current concentration of greenhouse gases has already committed us. Both are important although mitigation, in terms of cause and effect, is clearly of greater priority at this point in time: while the ability to keep temperature rises within a manageable range still appears to be within our capabilities.

<sup>&</sup>lt;sup>3</sup> The Stern Review, 2006, *The Economics of Climate Change*, HM Treasury & Cabinet Office

<sup>&</sup>lt;sup>4</sup> Her Majesty's Government, 2009, *The UK Low Carbon Transition Plan* 

The working group has therefore devoted nearly all of its time this year to issues of mitigation. 2008/09 has seen new peaks reached in the production of Central Government policy and consultation on climate change related matters. The drivers for this work have been the commitment within the Climate Change Act (December 2008) to reduce the UK's greenhouse gas emissions (expressed as tonnes of CO<sub>2</sub>) by 80% by 2050 and the recommendation from the Climate Change Committee, which has since set an interim target of at least a 32% reduction by 2020. A great deal of the consultation outputs around renewable energy, transport, heat and energy saving, a low carbon economy and zero-carbon development can be found usefully summarised within *The UK Low Carbon Transition Plan (national strategy for climate and energy)* that was published in July this year. Where time has allowed, the Working Group has responded to these national consultation exercises.

The key instruments for change, with direct implications or development potential for local authorities, that have emerged through policy and regulation are:

- production of 15% of all the UK's energy consumption from renewable sources by 2020 (this will include 30% of the UK's electricity supply);
- the introduction of feed-in tariffs to more readily facilitate the smaller scale selling of renewable electricity to energy suppliers (from April 2010);
- the introduction of a 'renewable heat incentive' to subsidise the cost of renewable heat generation (from 2011);
- maintaining subsidies on home energy efficiency measures;
- the use of Energy Performance Certificates for all buildings;
- using the Building Regulations to deliver zero-carbon homes from 2016 (and 2019 for all other buildings);
- continuing support for the European Emissions Trading Scheme and introduction of the Carbon Reduction Commitment as cap and trade mechanisms for the largest of the UK's organisational carbon emitters;
- strengthening of climate change objectives through the land-use planning system and the introduction of the eco-towns concept;
- support for the transition to a green economy.

There is little doubt that the policies (and associated targets) emerging from Central Government are setting new standards, direction and guidance. How these usefully and realistically translate to change on the ground across the villages, businesses and landscape of South Cambridgeshire is another matter. The increasing references to local authority responsibilities, community-based approaches and exemplar local schemes all indicate that expectations on local councils is high.

The integration of Central Government targets with the public administration of South Cambridgeshire has come through the new performance framework for local government. This includes three climate change specific national indicators, two of which have been adopted within the countywide Local Area Agreement (with targets to be achieved by April 2011) and the other is now drafted for inclusion as a key Council priority (separate local target). This puts all three very firmly in the spotlight. The Working Group has therefore taken a keen interest in their reporting and progress.

Indicator	Measuring	Reported value and commentary
NI 185	Annual CO <sub>2</sub> emissions from the Council's operations (excludes Council housing stock and commuting)	1862 tonnes $CO_2$ for 2008/09 (baseline). Target value for 2009/10 being calculated
NI 186	Annual average per capita CO <sub>2</sub> emissions from South Cambridgeshire residents	Baseline figure is 10.1 tonnes CO <sub>2</sub> /annum/capita. This is the 2005 figure. There is currently an 18 month time lag in reporting from DEFRA. 2006 figure was 10.2 tonnes. LAA target is an 11% reduction on baseline by April 2011.
NI 188	Level of preparedness for weather-related impacts of climate change	This is a 'process' indicator. SCDC is currently at Level 0. LAA targets were Level 1 by April 2009, repeated for April 2010 and then finally Level 2 by April 2011. Target missed for 2009 but will be achieved for 2010, keeping Council on track for final 2011 target

### Table 1: Formally measuring climate change performance – the national indicators

All local authorities should presently be seeking to develop their positions, capacity and available resources to progressively improve their performance for each of these indicators. As Members have homed in on the importance and relevance of each of these indicators so the Working Group, portfolio holder(s) and Cabinet have sharpened their support, advice and direction. From this, a range of cross-cutting and strategic responses have been brought forward as rapidly as possible to strengthen the Council's ability to act within its sphere of influence. The priority has been to understand where and how we can most effectively make a difference – generating genuine additionality over what would have happened in a 'business-as-usual' scenario. To this end the following (re. Table 2) have been progressed with the long-term view in mind – i.e. making the most of the Council's enabling, facilitating and place-shaping functions to deliver significant carbon savings in the transition to low carbon living in a low carbon economy across South Cambridgeshire.

# Table 2: Strategic and long term delivery measures to cut carbon emissions

(responding to NI 186)

# Getting a grip – understanding and quantifying the challenge

**Renewable energy:** Commissioning an assessment and analysis of South Cambridgeshire's renewable energy resources with a particular emphasis upon options for developing capacity at the community level (supporting parish level sustainable energy work – see below).

The final report concluded that "South Cambridgeshire has a pressing need and also the opportunity to develop renewable energy projects. As the District is largely rural, its energy consumption is higher than surrounding areas. Larger houses and greater transport distances than in an urban environment are the main explanation for this. However, the rural context provides a greater access to renewable energy resource compared with urban areas".

**Modelling carbon reduction options:** Working up, with consultancy support, a detailed modelling tool that allows us (at the residential and community scale) to convert local carbon reduction targets into scenarios for local realities (supporting parish level sustainable energy work – see below).

Assessing industrial and commercial emissions: Commissioning research and analysis of the carbon emissions arising from the district's industrial and commercial sector and bringing forward a mitigation options appraisal (supporting Climate Change Charter work – see below).

# Delivering

**South Cambs Sustainable Parish Energy Partnership:** Applying for and securing £200k of LPSA Reward Grant funding, via the South Cambs Local Strategic Partnership, for a 3 year project to establish a Sustainable Parish Energy Partnership in the district.

This high profile project is designed to develop a partnership of parish councils and local environmental groups to initially develop the capacity for, and installation of, energy conservation and efficiency measures as a precursor to bringing forward and implementing 2 high impact community renewable energy schemes.

This is a major project and relatively unique in its approach towards working with parish councils. The first year take-up has been higher than anticipated with 10 parishes signing-up. To support the project, which at this start-up phase is especially labour intensive, the Council has recruited a part-time Parish Energy Project Officer (from Aug 2009). The project is making good progress after its first six months of operation. It is hoped that a further groups of parishes can be brought on board in years two and three – progressively increasing impact and coverage.

**The Cambridge Climate Change Charter:** Applying for and securing an additional £30k of LPSA Reward Grant funding to work in partnership with Cambridge City Council (who have also secured £30k of LPSA funding) in commissioning a two year programme of practical help to businesses and other organisations in tackling the climate change agenda – saving energy and reducing emissions. This is being delivered through promoting the shared objectives of, and encouraging signing up to, the Cambridge Climate Change Charter.

An additional important item of strategic work has been completed to support progress on climate change adaptation. This was commissioned in partnership with the county council and other districts and involved an assessment of high impact weather related events over the past ten years as an important pre-cursor to assessing and developing preparedness to the anticipated effects of climate change at the local level.

Each of the above items strengthens South Cambridgeshire's response to the climate change agenda from a combination of strategic understanding and a growing body of locally tailored delivery experience. As introduced above these items of work represent a shift to the long view - recognising that carbon mitigation and climate adaptation are developing fields and will remain the central responsibilities and accountabilities within the field of environmental sustainability for the foreseeable future. As this is increasingly accepted, so the impact of climate change will be felt in the broader arms of sustainability which also embrace economic and equity issues.

Alongside helping to develop and bring forward these more comprehensive and integrated approaches, the Working Group has continued to fulfil an advisory and supportive brief for the narrower but still important initiative-based work arising from specific service areas within the Council. These specifically include procurement, planning, travel for work and sign-posting around grant-funding for energy saving and renewable energy measures, internal office-based recycling and energy use, and climate-proofing service delivery and other project work. These items often do not get as far as Working Group agendas due to the need to carefully prioritise the meeting time available, however their status may often be raised by the Chair and Vice-Chair in the process of pre-meeting agenda sifting.

Progress is these areas has tended to move in fits and starts depending upon individual service priorities and resource availability. However, in recent months several of these have begun to step up a gear:

- the procurement strategy now has a section on carbon and life-cycle assessment although training on this has yet to be rolled out;
- a Supplementary Planning Document (SPD) is being drafted to include a specific section on sustainable design and construction;
- member training on sustainable design and construction is proceeding with the imminent release of the new interactive 'workbook';
- work on the viability assessment of site-wide renewable energy options for Northstowe has continued to make some progress despite a marked slowing of the planning application process;
- the recently inspected Area Action Plan for North-West Cambridge has set new standards for environmental sustainability in the growth areas;

- the internal SCDC Travel for Work Plan (Travel Link) is now progressing well into implementation;
- a small pot of funding made available through Home Energy Conservation in Environmental Health to grant support domestic solar hot water and photovoltaic panel installations is experiencing significant interest and take-up and is now almost fully allocated for 2009/10;
- individual referrals for CERT (Carbon Emissions Reduction Target) funded/subsidised home insulation continue at a steady but still relatively slow rate – the Sustainable Parish Energy Programme and work on fuel poverty (under NI 187) are both specifically looking to significantly improve local take-up;
- SCDC office accommodation work around energy saving and recycling is about to commence. This will look to incorporate the Travel Link delivery work to create one integrated internal sustainability stream of work and officer support group;
- climate change has been included within the guide on corporate cross-cutting issues for the 2010/11 round of service planning. It will also be included within a project quality check for LSP funded work.

# Moving On...

The Council, the Local Strategic Partnership and the members of the Working Group have for some time accepted that to generate the required impact they must take more active steps to reduce carbon emissions across the district. 2008-09 has done this, setting a firm evidence base for action: whilst moving beyond initiating the process of awareness raising into committed engagement and on towards delivery.

Experience has proved that impersonal sign-posting and one-size-fits-all information dissemination is rarely enough to create the level of activity required in the transition to low carbon living in a low carbon economy. In seeking to encourage agency, greater agency is required from the enabling body (be this the district council or local strategic partnership or any other public sector partner). This has been well illustrated in the sustainable parish energy work to date – the broad objectives and outcomes maybe shared but each parish is different: different contexts, geographies, issues, willing individuals and ways of wanting to do things. This means the enabling work must be flexible, tailored and very accessible from all perspectives. A high level of hands-on enabling support is therefore a necessity, and not just at the officer level – where direct Ward Member encouragement has been included it has proved invaluable.

The importance of leading by example is also acknowledged and this requires additional agency within the enabling organisation to ensure that it can provide working examples of good practice. In order to generate an integrated impact across all the Council's services, all service areas will need to internalise carbon reduction and climate adaptation. It can no longer be a bolt-on or acknowledged on a 'fits where it touches' basis. The Council recognises this and will be reviewing and updating its practices where appropriate over the coming months.

The next eighteen months look to be very busy ones for the Climate Change Working Group as the Sustainable Parish Energy Partnership continues to develop and move forward into its stronger delivery phase, and the work the district's industrial, business, other public sector and voluntary organisations to reduce carbon emissions begins to deliver under the auspices of the Cambridge Climate Change Charter.

Internal work within the Council itself, in relation to service delivery, procurement, facilities management and travel for work will also be coming together to ensure that the authority is leading by example.

The growth agenda can also be expected to increase its demands as the drive to maximise carbon reduction, include site-wide renewable energy solutions and secure climate change resilience become increasing necessities.

Alongside commercial and domestic, transport is the third sector of major contribution to carbon emissions in the district and one that is in need of careful review.

All of these elements will be brought together within a new South Cambridgeshire Climate Change Action Plan (to replace the existing Climate Plan) that will guide activity over the next three to five years. The Working Group will play an essential reference and advisory role during the drafting of this plan which should be in place by March next year.

#### An afterword on delivery

In almost every issue that the Working Group has considered it has had to assess the District Council's role and potential as an agent in tackling the climate change agenda. This is important if the authority is to be effective and make the most of its position, resources and capacity. Experience has shown, and continues to show, that there is tremendous strength and untapped potential in making the most of existing delivery channels (such as the county-district-parish route, community group membership, longstanding partnerships and well established national agency and regional structures).

The temptation with much delivery-focused climate change work is to try to create new delivery channels and new networks for well-intentioned programmes when, in fact, there is already

something established in place. Unfortunately, with short-term funding (often two or three years at most) these projects expend a tremendous amount of resource in trying to open a new channel to get to their target audience. This can severely curtail the time and resources available to realise that all important delivery on the ground. Over the past twelve to eighteen months we have seen the casualties of this approach as planned programmes of change have simply become short-lived 'initiatives' with limited delivery and next to no legacy or exit strategy to the mainstream.

It has not always been immediately obvious, but for those items that the Working Group has considered, the ones that generate the most interest, appeal and excitement are working along existing channels of communication and activity (the South Cambs Sustainable Parish Energy Partnership being a particular case in point).

The reason for this is, perhaps, that responding to climate change can never have a single one-off solution (at least not with the technology likely to be around for the next 30 years) that can be delivered with a one-off programme (as was largely the case with the hole in the ozone layer). Fossil fuels are engrained into every aspect of our lives (the source of the energy itself tends to be secondary to its application) powering our homes, cars, businesses and lives in general. Tackling climate change will have to work on all these energy requirements and in all the different ways we use energy as individuals, groups and communities. All the access channels are there – we just need to identify the best ones and make the most of them until having your house properly insulated is as 'normal' as redecorating, or having solar hot water installed is as 'normal' as having a satellite dish, or swapping to a quality green energy tariff is as 'normal' as swapping over your mobile phone service provider.

There is therefore an argument that, to create new 'normals' we may find it far more productive to work down the 'normal' channels. Innovation can and will need to abound but should look to identify and make the most of tried and tested delivery channels for getting things done. This approach to engagement and delivery picks up on Professor Mike Hulme's train of thinking that, rather than asking 'how do we solve climate change?', flip the question around and ask 'how do the requirements for tackling climate change alter the way we arrive at our personal aspirations and our collective social goals?'.

# Appendix A:

# Climate Change Working Group: principle activities listing 2008/09

The lisitng below is a summary of the work carried out by the Working Group for 2008/09. It has been broken down under the 'drivers of change' headings of regulation, technology and behaviour.

### Supporting regulatory measures

- i.) Working through the planning system to secure optimal carbon savings in the South Cambridgeshire growth areas.
- ii.) Considering and responding to Government policy consultation documents: i.) UK Renewable Energy Strategy, ii.) A Definition of Zero Carbon, and iii.) Home Energy Saving Strategy.
- iii.) Taking a reference and scrutiny role for the reporting and performance improvement of the three climate change national indicators NI185, NI186 and NI188.

#### Promoting and assessing sustainable energy technology solutions

- iv.) Developing and considering the best use of renewable energy resources in South Cambridgeshire.
- v.) Visiting and reporting on the Kingspan/Potton Lighthouse at the Building Research Establishment in Watford.
- vi.) Reporting on the retro-fitting of air-source heat pump technology to replace oil-fired heating in a council-owned property in Elsworth.

# Enabling and facilitating behaviour change

- vii.) Making the case and securing funding to develop and establish the South Cambridgeshire Sustainable Parish Energy Partnership.
- viii.) Developing an approach to climate change accountability in project and policy work.
- ix.) Bringing forward and evaluating the commissioning brief for a survey and analysis of carbon emissions from the South Cambridgeshire business and commercial sector.
- x.) Reviewing and supporting a joint project with the City Council that will offer practical support for carbon reduction to local businesses and organisations.
- xi.) Establishing working links with organisations such as the Energy Saving Trust, the East of England Development Agency, Cambridgeshire Together, Renewables East and Cambridge Carbon Footprint for the benefit of Council operations and the residents of South Cambridgeshire.
- xii.) Acting as the reference group for the Energy Saving Trust's One-to-One support programme with the Council.

# Appendix B

# Climate Change Working Group Terms of Reference and Membership 2008/09

The Climate Change Working Group was established by Council on 28 September 2006 with terms of reference agreed on 25 January 2007.

It is a 'Task and Finish' body, consisting of nine District Council Members, appointed on a proportional basis, supported by relevant Council officers, and by independent experts co-opted as and when required, and detailed to present its report to Council within a set period (this Annual Report). The membership of the group includes a representative from the Local Strategic Partnership.

# Terms of Reference:

- To identify activities and processes within South Cambridgeshire that could be considered as contributing to climate change, and to encourage residents to adopt practices that minimise or eliminate any adverse impact.
- To consider how the District Council can best achieve its corporate objectives and priorities so as to minimise or eliminate any adverse impact from climate change by considering, among other things, the design and construction of new housing and public buildings.
- To consider how Members and staff of South Cambridgeshire District Council can contribute as individuals to the reduction or elimination of any adverse impact from climate change.
- To evaluate the effectiveness of energy management within South Cambridgeshire Hall, the Waterbeach Depot, and sheltered housing schemes, and identify any way in which improvements could be made that would reduce the Authority's carbon footprint.
- To address environmentally-friendly transport issues in relation to the Council's vehicle fleet, including its staff car leasing scheme, and to encourage 'green' commuting by Members, staff and residents.
- To examine the benefits of climate change mitigation measures in the context of their financial implications.
- To advise on actions to be undertaken under the Nottingham Declaration on Climate Change.

# 2008/09 Membership

- Cllr Dr Stephen Harangozo (Chairman)
- Cllr Peter Topping (Vice-Chairman)
- Cllr Tom Bygott
- Cllr Simon Edwards
- Cllr Dr David Bard
- Cllr Anthony Berent
- Cllr Roger Hall
- Cllr Dr Douglas De Lacey
- Cllr Mrs Bridget Smith

# **Principal Officer support:**

- Richard Hales Strategic Sustainability Officer (Ext. 3135)
- Ian Senior Democratic Services Officer (Ext. 3028)