



ADDRESSING CLIMATE CHANGE IN SURREY AND GUILDFORD

**GUILDFORD LOCAL COMMITTEE
20th January 2005**

KEY ISSUE:

The need to address the wide-ranging impacts of climate change on the south east region, Surrey and Guildford has been increasingly recognised over the past six years. The time is ripe for the necessary joined up actions to address the impacts and opportunities arising from climate change on SCC services, and on the county as a whole, and develop an action plan to do so.

SUMMARY:

Surrey County Council has taken a key leadership role regionally and nationally in developing key partnerships and in supporting local partners to begin to develop the responses needed. To focus actions for the County Council a draft climate change strategy has been developed. This identifies key themes for future actions and programmes to ensure that the negative impacts of climate change are minimised and that opportunities are maximised.

OFFICER RECOMMENDATIONS:

The Committee is asked:

- (i) Whilst noting the leading role that SCC has taken nationally, and the work that SCC and GBC are jointly taking locally and regionally in addressing climate change, to comment on the draft SCC Climate Change Strategy attached to this report;

- (ii) To require that an annual progress report be reported to this committee

1. INTRODUCTION and BACKGROUND

- 1.1 The context for addressing climate change is clear and the importance that we should give to the issue is captured by Sir David King, the Chief Scientific Advisor to the UK Government, who recently described climate change as “... *the most severe problem that we are facing today, more serious even than the threat of terrorism.*”
- 1.2 There is no doubt that Climate Change is real and that human activity is a key component of the changes that are being recorded. As scientific understanding develops and new evidence is discovered, the more extreme these changes are expected to be. However, resolving the problem will create lots of opportunities.
- 1.3 The original report “*Rising to the Challenge, The Impacts of Climate Change in the South East in the 21st Century*” highlighted that the South East has potentially more to gain, and certainly more to lose, than any other region in the UK. This has been reinforced by the recent *SECTORS* report (South East Climate Threats and Opportunities Research Study) and it is clear from this work that there are real risks and benefits for Surrey.
- 1.4 The County Council continues to work with partners in the South East, through the South East Climate Change Partnership (SECCP), to develop local responses. The SECCP has a comprehensive work programme to address a wide range of issues, and this is focussed through a number of sectors groups. SCC leads the Tourism and Emergency Planning sector groups of the partnership and GBC leads the Emissions Monitoring sector group.
- 1.5 SCC also plays a leading role nationally, chairing the UK Inter-regional Climate Change Group, and being a member of the steering committee for the UK Climate Impacts programme. This provides a valuable platform to ensure that SCC is at the forefront of understanding the potential impacts of climate change and that the interests of the south east and Surrey in particular are represented at the national level.

2. ANALYSIS AND COMMENTARY

- 2.1 Climate Change was highlighted as a key issue during the Community Strategy consultation. It is clear from the responses, that there was a strong view that climate change was a key issue of concern, but also one where there was a lack of understanding. The key message that came from the consultation was that there is a desire to better understand what climate change will mean for Surrey’s communities, and what actions

needed to be taken to address them. It is for this reason that the development of a countywide action plan is proposed.

- 2.2** The draft SCC Climate Change strategy (attached as Annexe 1) needs to address both the effects of climate change - adaptation, and the emissions of greenhouse gases - mitigation. To this end the strategy supports actions to reduce the emissions of greenhouse gases from the council's own buildings through the council's energy policy, and by promoting the development of renewable energy in Surrey. SCC is also working with the Carbon Trust, as a part of a national pilot programme, to develop a "Carbon Management" programme for its activities.
- 2.3** The Climate Change Strategy also promotes actions to plan, design and construct developments that are more resilient to climate impacts both through their location and form.
- 2.4** It is important that the potential economic impacts of climate change on Surrey are recognised, even though this is far from straightforward to calculate. However, it can be estimated that by the end of the century the potential financial loss to the Surrey economy from an extreme climate year could, if adaptation measures are not properly planned, be equivalent to 5% of Surrey's GDP (£1bn at today's prices) and half of this figure in an average year. To ensure that this issue is properly understood the action plan is linked into the developing Economic Strategy for Surrey.
- 2.5** The SCC Climate Change Strategy is intended to act as a focus for action to address the impacts of climate change on the county council's services. It is also intended to act as a catalyst to develop a broader action plan to address the impacts of climate change on the county as a whole.
- 2.6** The Local Committee is asked to comment on the draft strategy, and to propose any additional strategic themes that they believe will assist in the delivery of a comprehensive action plan for the County of Surrey

3. CONSULTATIONS

Informal consultations will take place with David Davis, Executive Member for the Environment and Christine Stevens, Executive Members for People First, prior to the Climate Change Strategy report going to the SCC Executive for approval, by the summer 2005.

4. FINANCIAL SUSTAINABLE DEVELOPMENT IMPLICATIONS

There are considerable and far reaching financial, social and environmental implications across the whole spectrum of climate change impacts. This will become increasingly evident over time if the issue is not addressed sufficiently.

5. CRIME & DISORDER, EQUALITIES AND SELF RELIANCE IMPLICATIONS

The direct implications for Crime & Disorder, Equalities And Self Reliance (Social Inclusion) are less obvious. However, not addressing the issues is likely to have a considerable adverse impact on social cohesion.

6. CONCLUSION AND REASONS FOR RECOMMENDATIONS

The Local Committee is asked to consider and comment on the attached draft Climate Change Strategy for SCC and to receive an annual progress report.

Report by: Phil Sivell, SCC Group Manager, Sustainability Projects & Assessments

LEAD/CONTACT OFFICER: Phil Sivell

TELEPHONE NUMBER: 020 8541 9856
psivell@surreycc.gov.uk

BACKGROUND PAPERS: *SECTORS* report (South East Climate Threats and Opportunities Research Study) available from:
“www.climatesoutheast.org.uk/downloads/SECTORS_technical_report_final.zip”

Climate Change Strategy

Overall Aim

To ensure that the county council understands the likely impacts of climate change in Surrey and to ensure that it adopts plans made, using the best available information, to avoid disruption to services and to maximise opportunities that arise throughout the county as a result of such change.

Objectives

To identify the ways in which climate change will impact upon Surrey and the services the Council operates on behalf of residents.

To develop adaptation strategies that help minimise the negative impacts of climate change on all communities in the county and maximise the opportunities that will arise.

To maximise the efficient use of resources and, in so doing, reduce the emissions of greenhouse gases arising from Council activities.

Background

Climate Change is now widely recognised as one of the greatest challenges facing society today. Sir David King, the UK chief scientist, has said that “Climate change is a far greater threat to the world than international terrorism”

The first element to be considered in the strategy is that of the emissions that are believed to be the cause of the enhanced greenhouse effect. Greenhouse gas concentrations have risen by 35% since the industrial revolution and, globally, have continued to rise at an unprecedented rate. The overwhelming consensus of scientific opinion is that this has resulted in the most rapid change in global climates in human experience and that this is very unlikely to be a result of natural factors alone.¹

There are many different gases that influence the greenhouse effect. The principal greenhouse gas of concern is carbon dioxide (CO₂). This is primarily produced by the combustion of hydrocarbon fuels. Emissions of CO₂ are increasing globally at an accelerating rate and both the Royal Commission on Environmental Pollution and the Government’s Chief Scientist have stated that society must reduce emissions of CO₂ by 60% if we are to stabilise atmospheric concentrations and prevent dangerous climate change.

This will take time. Moreover, even if successful, we are already committed to at least 50 years of further climate change because of the emissions that have already taken place (and the fact that these will persist in the atmosphere for a long period). Hence the importance of planning for management of local and regional impacts *now*, based on sound research.

Research into climate change in the UK is coordinated through the UK Climate Impacts Programme (UKCIP). One branch of this work has concentrated on

¹ Intergovernmental Panel on Climate Change – 3rd Assessment Report 2001

producing regional scale scenarios of future climate for the UK. These indicate that by the end of the century summer temperatures in the South East could be up to 5°C warmer than at present. Winters are also expected to warm, although to a lesser extent.

Overall the amount of rainfall would remain broadly similar. However, this would mask significant seasonal changes, with summers predicted to be up to 50% drier and winters 25% wetter.

However, the greatest challenge is likely to lie not in these changes in average conditions. It will be the extremes that will cause the greatest stress on our infrastructure and environment. It is anticipated that extreme weather events will be more pronounced in future. They will also occur much more often.

The predicted impact of these changes on the landscape, on environmental quality and on the regional and local economy were discussed in the original report "*Rising to the Challenge: The Impacts of Climate Change in the South East in the 21st Century*". This highlighted that the South East has potentially more to gain, and certainly more to lose, than any other region in the UK. If efficient and timely planning does not take place to manage climate change impacts, it is estimated that the average annual cost to Surrey's economy by the end of the century would be of the order of £500M p.a. in an average year at today's prices. In an extreme year, it could be well in excess of £1bn.

Strategy Themes

1. In line with the Council's Energy policy reduce our emissions of CO₂ by 10% by 04/05 and a further 5% by 08/09 from a baseline of 2000/2001.

The UK has a domestic CO₂ reduction target of a 20% reduction from a 1990 base by 2010. Increasing the efficiency in the use of energy will result in running cost savings.

2. Further reduce our greenhouse gas emissions by developing a carbon management action plan.

This should address carbon emissions arising from energy use in our buildings, transport emissions from our transportation contract, energy use in street lighting, embedded energy arising from procurement practices and emissions arising from waste management practices.

3. To promote the uptake of renewable energy technologies in Surrey.

The South East Plan has a range of policies promoting the take up of renewable energy technologies in the region, and has produced sub-regional targets. The Surrey Structure Plan requires that 10% of the energy for new developments is generated from renewable resources. This will support a reduction in carbon emissions and support the potential for new economic activity in Surrey.

4. To promote the design and construction of climate resilient buildings through demonstration schemes on SCC land.

New developments constructed today will have a life of 60-100 years or longer. As a result they will be required to function efficiently and effectively under climatic regimes that are predicted to be very different to today's. By adopting designs that can adapt over their lifetime, we will make more efficient use of valuable land and natural resources. Working with developers in Surrey, we can demonstrate leadership and help them develop new products for a changing market.

5. To lead the development of spatial planning in the light of climate change in Surrey, including through our participation in the ESPACE project.

The planning system will need to adapt to take account of the impacts of Climate Change. ODPM issued some initial guidance, *The Planning Response to Climate Change – Advice on Better Practice*, in September 2004. The EC and ODPM funded project ESPACE – European Spatial Planning Adapting to Climate Events – will highlight some of the key issues for the future development of spatial planning.

6. To promote the effective protection of the flood plain.

Extreme weather events are predicted to increase both in frequency and intensity. As a result we need to ensure that floodplains are effectively protected. Where development in the floodplain is unavoidable we should seek the best possible advice, including flood risk assessment, regarding the suitability of the development for the location and to ensure that flood resilient design and construction techniques are adopted.

7. To ensure that the economic impacts of climate change are incorporated into the Economic Strategy for Surrey.

If not well managed, by the end of the century financial losses arising from climate change could cost the Surrey economy £1bn in an extreme year. The economic strategy will seek to promote the development of adaptation strategies and adaptive actions to reduce businesses' vulnerability to climate change and to maximise opportunities that arise.

8. To play a leading role in promoting the understanding of climate change impacts and the development of adaptation strategies.

Climate Change is increasingly being recognised as a key issue at a local, regional and national scale. However, many stakeholders are unclear about the facts and unsure what actions they can and need to take over a range of timescales. Also few stakeholders have the capacity to keep abreast of current thinking and best practice. The county council can play a key strategic and leadership role in distilling best practice from across the UK and in enabling local adaptive actions. The council will continue to play a leading role in the South East Climate Change Partnership and its sectoral work programme.

9. To work with key actors in Surrey to promote the development of a climate action plan for Surrey.

The Surrey in 2020 consultation for the Community Strategy highlighted climate change as a key concern. However, no clear view of the issues for Surrey, or consensus on the action required emerged from the process – only that it is a major issue for which a response needs to be developed. The principal impacts of climate change in Surrey will be scoped and an action plan developed to minimise Surrey's vulnerability and maximise new opportunities.