



# South East Climate Change Partnership

A partnership of the public, private and voluntary sectors

President: Sir Crispin Tickell GCMG KCVO

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**1C/South East Climate Change Partnership (7119)**

## **Submission to South East Plan Examination in Public**

**On behalf of the Executive Committee of the  
South East Climate Change Partnership**

**October 2006**

## Context

1. We refer the Panel to our June 2006 consultation response to the draft South East Plan for important detail (see Annex 3). This statement builds on that response.
2. Climate change is a fundamental challenge to the way we in the South East live. Southern regions can expect greater climate change than other parts of the UK and the South East is particularly vulnerable because of the extent and nature of spatial development that is exposed to climate risks. Urgent action is needed now to plan and implement:
  - Adaptation: to help us to prepare for unavoidable impacts resulting from our legacy of carbon emissions, as well as to improve resilience to current weather.
  - Mitigation: to reduce emissions and help avoid more dangerous impacts in the future, as well as to reduce current air pollution.
3. The Plan provides a crucial opportunity to implement policies that address climate change and provide for sustainable development. Failure to embed this across all policies will compromise delivery of the Plan's objectives and the region's long-term wellbeing.
4. PPS1 requires regional planning bodies to "ensure that development plans contribute to global sustainability by addressing the causes and potential impacts of climate change." PPS11 obliges Regional Assemblies to consider climate change in developing the RSS. We expect that the forthcoming PPS26 will reflect the need for consistent and rigorous delivery of climate change policy and increase further spatial planning's positive role in this. It is important that the Plan reflects the trajectory of climate change policy and leads by example.

## Question 1C.1

### ***Does the Plan take sufficient account of the implications of Climate Change and provide appropriate guidance?***

5. We welcome the Regional Assembly's commitment to highlighting climate change as an over-arching issue in the Plan and the inclusion of cross-cutting policy CC2. The Assembly has also shown leadership in commissioning a separate Climate Change Implementation Plan. We strongly endorse inclusion of climate change policy in the final Plan.
6. However, we believe the current policy and guidance should be strengthened. The Plan's Sustainability Appraisal (SA) concluded that "It appears that the crosscutting policies act more as guiding principle rather than as fundamental drivers for policies within the Plan." Our consultation response recommended new wording to strengthen commentary in Section A and a more comprehensive set of principles for CC2. The Plan must be more explicit in ensuring that all those delivering it recognise the fundamental significance of climate change for them. To fully demonstrate CC2's reach across the Plan, we recommend that:
  - CC2's text on adaptation refers to a greater range of impacts, e.g. heatwave, and more areas of risk, e.g. health, which planning can influence, directly or indirectly.

- A cross-referencing table be included for CC2, demonstrating which policies address climate change causes and impacts. The Assembly's audit of cross-cutting policies could inform this, although it is unclear at present how this was undertaken.

***Is the guidance carried forward into subsequent policies?***

**Regional and Sub-Regional Policies**

7. Climate change priorities have been appropriately included in some policies, particularly NRM3, NRM6 and EN1-6, although there is scope for strengthening NRM1 to require high water efficiency in all new development. We strongly recommend that these policies are included in the final Plan.
8. Several other policies go some way to tackling the causes of climate change, e.g. H5, T1, T4, T5, W11, W12 and TSR4. There is an opportunity to indicate the contribution they make to mitigation, and to cross-reference good policies throughout the Plan.
9. However, we remain concerned that CC2 - especially on adaptation - is not carried into other regional and sub-regional policies in the Plan. The SA found that "while Policy CC2 explicitly mentions adaptation to risk and opportunities, this is not then followed up on in an explicit way in other sections of the Policy Framework." Climate change - particularly adaptation - appears to have been largely overlooked in the development of many regional policies – and especially in sub-regional policies. In remarking that the latter do not seem to regard climate change as a strategic issue, the SA concluded that neither mitigation nor adaptation opportunities are addressed. Annex 1 includes example text which could be used to improve key policies. We recommend that the final Plan include an assessment in each policy chapter, highlighting how climate change may impact that sector or sub-region and how policies will contribute to mitigation and adaptation.

**Spatial Strategy**

10. In addition to specific references to avoiding areas at risk of flooding and sea-level rise for new development, PPS1 requires development plans to take account of "the potential impact of the environment on proposed developments by ... as far as possible, ... accommodating natural hazards and the impacts of climate change." Although, at the local level, where specific sites are identified, the Plan provides for adaptation (e.g. NRM1, NRM3, and NRM6) and mitigation (e.g. T1, T4 and T5), we are unclear as to how the full range of climate change impacts across the region, including vulnerability to drought, sea level rise etc have been taken into account in determining the broad allocation of development e.g. policy H1.
11. Commentary on the NRM policies explains that water resources, and the impacts of climate change on these, has been addressed in the spatial options. However, it is unclear in the Plan how these have been accounted for in making the final allocation at the broad scale. The Plan should show clearly how this has been done and the issues and constraints identified.
12. Furthermore, the Plan should ensure that, as far as possible, all climate change impacts are an explicit factor in the location and scale of new development, at regional and local levels. These impacts will be felt within the Plan's lifetime - and

increasingly beyond that. It is therefore essential to consider the suitability of long-term development plans for future climate.

13. The Plan does not address the legacy of past development in locations that are unsustainable due to climate change. There may be limited opportunities for the Plan to assist, but those available should be pursued. Where brownfield redevelopment is proposed, the benefits to climate change mitigation and adaptation should be presented. PPG25 provides a precedent, in requiring that the planning system be used to re-locate, or replace, developments at risk of flooding to safer locations. Longer term climate change impacts (e.g. at the coast) may be profound and require a more radical spatial planning response.
14. Section C discusses the Plan's SA (March 2006) but makes no reference to its conclusions. As we quoted earlier and in our consultation response, the SA provided an important critique on climate change. It concluded that the Plan would negatively affect the following sustainability objectives:
  - To address the causes of climate change through reducing emissions of greenhouse gases and ensure that the South East is prepared for its impacts.
  - To reduce road congestion and pollution levels by improving travel choice, and reducing the need for travel by car/lorry.
  - To reduce the global social and environmental impact of consumption of resources by using sustainably produced and local products.
15. The final Plan must demonstrate that action is being taken to address its negative impacts and that a longer term view is being taken in relation to climate change.

### ***Would it appropriate to set additional and/or more specific targets?***

16. Policy CC4 expects "high standards" for energy and water efficiency, but sets no specific targets (although there are targets related to mitigation under Policies EN1-6). In the absence of clear targets, the Plan will fail to deliver the step change required in the region and will miss a unique opportunity to mitigate and prepare for climate change in a significant proportion of the region's built environment.
17. We recommend that South Hampshire's sub-regional policy SH14iv be adopted throughout the region, as suggested in the context to policy CC4, to require (or at least expect),

"... new commercial and residential buildings ... to achieve at minimum an equivalent rating to Ecohomes/BREEAM Very Good, and post 2012 an equivalent rating to Ecohomes/BREEAM Excellent, with particular emphasis on water efficiency, unless such requirement is impractical due to the size of the development"
18. Accompanying the targets, the Plan should direct advice to planners and developers on how to achieve compliance in LDFs and development proposals, e.g. through checklists and guidance. Checklists are available (in addition to rating systems such as BREEAM) for mitigation and adaptation. SECCP and others developed a comprehensive adaptation checklist, and SEEDA's Sustainability Checklist and Woking Borough Council's Climate Neutral Checklist covers both mitigation and adaptation (see Annex 2). A recent cross- regional research project has produced an adaptation good practice guide for sustainable communities.

19. Policy CC4 does not include explicit references to building for future weather conditions such as flash flooding or heatwaves. Given that much of the development set out by the Plan will have a design life lasting most of the century, the full implications of future climate must be considered in the design of development, to achieve the SEP's objectives and avoid costly retro-fitting. The adaptation checklist, along with other initiatives, such as the UKCIP/EPSRC programme Building Knowledge for a Changing Climate, provide tools for doing this.

### **Implementation Plan (IP)**

20. We welcome the recognition in the March 2006 draft Implementation Plan (IP) that climate change is a major issue for the Plan, and the recommendation that the separate Climate Change Implementation Plan produced by the Assembly be used as the framework for delivery. However, we are concerned that these good references were removed from the revised IP (October 2006).
21. The treatment of climate change in the SA of the IP was surprisingly poor, given that its stated focus was "Does the Implementation Plan address the issues raised by the SA [of the Plan] in terms of the overall sustainability of the South East Plan?" The Plan's own SA had highlighted several concerns on climate change but the IP's SA does not pick these up. Nevertheless, it stated only that some climate change mitigation issues had been addressed and gave an overall amber light against "addressing the causes of climate change" - with no references to impacts and adaptation. We strongly recommend that references to climate change are restored and strengthened in the final IP, with respect to both mitigation and adaptation.

### **Question 1C.2**

22. CC2's target for CO<sub>2</sub> emissions reductions by 2010 is the same as the national target. Going beyond that, we recommend that the Plan commits to progressive tightening of emissions to meet the national 60% reduction target by 2050. The Plan should provide an assessment of how these will be met, including the contribution of different sectors, and the potential role of planning in delivery. Targets should be absolute rather than per capita.
23. Any new development will increase CO<sub>2</sub> emissions, unless it replaces development of a poorer standard or uses renewable energy. Therefore, we endorse the inclusion of policies and targets on energy use (EN1, EN2) and renewable energy sources (EN1, EN3, EN4). We agree that these should be set in the context of regional emissions reduction targets (Policy EN6i). However, we would like to see the wording of these policies (EN1-6) tightened, with 'encourage' replaced by 'expect'; otherwise there is a real danger that targets will be missed.

### **Question 1C.3**

24. We strongly support the principle of reducing the region's ecological footprint. We would like to see a clearer definition of policy CC3, to describe how the footprint will

be measured and monitored, what the current footprint is and a specific reduction target in the second half of the Plan period.

25. As part of the ecological footprint, the Plan should include measurement of the region's carbon footprint. An inventory of carbon emissions would be the first step to stabilising and reducing these and the Plan should set out regional reduction trajectories. This is currently being undertaken locally in some areas (e.g. Southampton City Council is involved in a pilot as part of Councils for Climate Protection).

#### **Question 1C.4**

26. We endorse the important role of behavioural change as a delivery mechanism in the Implementation Plan. If implemented in line with policies in the Plan and the need for targets, it will go some way to reducing the ecological footprint.
27. Actions designed to reduce the ecological footprint must also take account of the impacts of climate change on the footprint and how these could compromise delivery if adaptation is not properly planned for. Behavioural change will also be a key factor in delivering adaptation e.g. for coastal re-alignment.

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**Annex 1: Suggested policy alterations/additions to increase coverage of climate change throughout the Plan**

<b>Plan Section</b>	<b>Contribution to climate change</b>	<b>Suggested change to policy to improve inclusion of mitigation</b>	<b>Climate change impacts</b>	<b>Suggested change to policy to improve inclusion of adaptation</b>
<b>D2 Economy</b>	Major contributor to GHG emissions – 28% UK CO <sub>2</sub> emissions from industry, 16% from commercial and public sector (Defra 2006)	RE2 (Employment and Land Provision) and RE4 (ICT & Changing Working Practices) Recognise the potential important contribution to climate change mitigation.	Affect employment land provision  Increased thermal discomfort in buildings and reduced staff productivity	RE2 (Employment & Land Provision) Recognise the impact of climate change on older buildings and potentially unsuitable sites.  RE4 (ICT & Changing Working Practices). Provide facilities that allow staff flexible working in response to changing climate.
<b>D3 Housing</b>	Major contributor to GHG emissions – 27% of UK CO <sub>2</sub> emissions from domestic sources (buildings, space heating, cooking, lighting etc.), (Defra 2006)	H5 (Housing Density and Design) Cross reference to parts of EN1-6 relevant to housing; include targets.	Increased coastal and fluvial flooding  Water resource pressure  Pressure on sewerage system  Subsidence  Increased need for cooling  Reduced demand for heating	H3 (The Location of Housing) Recognise the impact of climate change on potential land for development e.g. location should reflect future availability of resources.  H5 (Housing Density and Design). Applicants should be required to include a climate change checklist with their planning application. Require houses in flood risk areas to include flood proof design features. Incorporate cooling designs in new housing developments Developments in areas likely to be affected by subsidence in future will be subject to minimum standards for foundations Cross reference NRM1.

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<b>D4 Comms &amp; Transport</b>	Major contributor to GHG emissions – 28% UK CO <sub>2</sub> emissions from transport (Defra 2006)	<p>T4 (Communications Technology) Revise to more strongly encourage the use of e-working and reduce the need to travel.</p> <p>T5 (Mobility Management) Install 'plug-in points' for electric cars in new developments/town centres.</p> <p>T8 (Travel Plans and Advice) The policy should specific what major travel generating developments are.</p>	<p>Deterioration of road surface and rails in summer</p> <p>Reduced transport disruption in winter</p> <p>Uncomfortable travelling conditions</p>	<p>T1 (Manage and Invest) Re-word point v) to: "Improve the maintenance of the existing transport system and make provision for additional maintenance due to climate change impacts"</p> <p>T8 (Travel Plans and Advice) Develop contingency plans to deal with heatwave and storm conditions.</p>
<b>D6 Waste &amp; Minerals</b>	Methane is a potent GHG, 40% of UK CH <sub>4</sub> emissions come from waste treatment and disposal (Defra 2006)	<p>W12 (Other Recovery and Diversion Technologies) and W13 (Landfill Requirements) Explicitly refer to methane from landfill for energy generation.</p>	Increased decomposition rates	<p>W6 (Recycling and Composting Targets) Increased decomposition rates and problems with odour should be referenced.</p>
<b>D10 Tourism</b>	The majority of GHG emissions from this sector are a result of transport.	<p>Cross reference TSR4 with T5 (Mobility Management) Improve public transport routes linking tourist facilities and transport terminals (airports, ports, rail terminals etc)</p>	<p>Opportunity for increase in tourism</p> <p>Opportunity for increase in outdoor recreation</p>	<p>TSR1-7 Recognise possible opportunities associated with some changes in tourism and recreation within the region and transport implications.</p>

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<b>D11 Social, Cultural &amp; Health</b>			Increase in heat induced illness  Reduction in cold related illness	S2 (Full Life costing of Public Service Facilities) Should consider climate change over the design life.  S3 (Supporting Healthy Communities) The benefits and threats of climate change could be included.  S4 (Promoting Sustainable Health Services) Develop contingency plans to deal with heatwave conditions

Department of the Environment, Food and Rural Affairs (Defra), 2006, *The Environment in you Pocket 2006*, Defra, London

## Annex 2: Examples of climate change checklists and guidance

### **Adapting to climate change: a checklist for development (Three Regions Climate Change Group, 2005)**

This checklist was developed by the Three Regions Climate Change Group (SECCP with London Climate Change Partnership and East of England Sustainable Development Roundtable) and is aimed primarily at developers, but also design teams, architects, surveyors, engineers and those within the wider development community. The aim is to future-proof developments and build in resilience to climate change impacts now and in the future. It is not intended to be a design manual but it identifies key climate change issues that need to be addressed during building design and development. Such issues would include:

- Site layout – e.g. solar gain, latent cooling, flood risk management.
- Building structure – e.g. building strength under stronger wind speeds, subsidence, thermal mass of building materials, opportunities for green roofs or walls.
- Ventilation and cooling – e.g. comfortable air temperatures, natural ventilation to reduce the need for cooling systems.
- Drainage – e.g. SUDS, compliance with groundwater regulations, flash flooding risks.
- Water consumption and efficiency – e.g. targets for efficiency, consumption levels under drought conditions, grey-water recycling.

See

[http://www.climatesoutheast.org.uk/publications\\_reports.php?back=publications.php](http://www.climatesoutheast.org.uk/publications_reports.php?back=publications.php)

### **Sustainability Checklist (SEEDA, 2003 - revised 2005)**

This Checklist is designed to be used by those involved in planning or building sizeable developments from estates to urban villages and regeneration projects. A subset of the Checklist is appropriate for smaller projects. It helps both at the strategic level, and at the more detailed estate/site level, focusing on the sustainability aspects relating to buildings and infrastructure. Using it will:

- Increase awareness amongst planners, developers and estate managers of the practical measures that can be taken to plan sustainability into a development
- Provide a framework for assessing the sustainability issues relating to buildings and infrastructure
- Give guidance on standards and indicators
- Provide developers with a method of demonstrating to planning authorities that sustainability has been systematically addressed in their proposals
- Help planners to specify sustainability in supplementary planning guidance/development codes
- Provide planners with a method of assessing the sustainability aspects of development proposals consistent with ODPM requirements.

This Checklist has been developed, in collaboration with an advisory group consisting of local authorities, developers, researchers and SEEDA, from BRE's Sustainability Checklist for Developments. It aims to bring a regional focus to the original Checklist, giving information on regional good practice, sources of further information, as well as how it relates to regional policy. The purpose of this is to allow all in the region to see and understand the context they are working in, and move them towards a common goal.

See <http://www.sustainability-checklist.co.uk/>

### **Climate Neutral Development; A good practice guide and checklist (Woking Borough Council, 2005)**

Woking Borough Council has adopted a five point Good Practice Guide for Climate Neutral Development. The guide offers developers advice on the following themes;

- Location and Transport
- Site Layout and Building Design
- Energy
- Sustainable Drainage Systems
- Water Conservation/Recycling

Each chapter contains suggestions of measures developers can take to mitigate the effect their proposals have on climate change and to adapt to its consequences. There are also many links to websites and other sources of further information.

Accompanying the Good Practice Guide is a checklist for developers seeking planning permission for their proposals. Developers are asked to fill in a yes/no box to indicate whether or not they have considered the issues raised in the Good Practice Guide when formulating their plans. This is then submitted with the planning application.

See <http://www.woking.gov.uk/council/planning/publications/climateneutral2>

### **Adapting to climate change impacts - A good practice guide for sustainable communities (Three Regions Climate Change Group, 2006)**

This report from a project in Defra's recent Cross Regional Research Programme on climate change impacts and adaptation was part-funded by SECCP and others in the Three Regions Climate Change Group. It provides advice on how to take account of the predicted impacts of future climate change when planning new developments. It is not a statement of government policy but is designed to inform policy making. While it identifies climate change issues associated with different types of location, the guidance focuses on site level decision making for climate change adaptation in site layouts and building design.

The guide is designed for use by all those involved in area and site level policy making, decision making, funding and development. It has been produced with particular reference to three case study sites in the Growth Areas in England, in Bedford, London and Kent, but it is equally relevant to development in other parts of the UK.

**Part 1** summarises the impacts climate change will have on development in the Growth Areas and beyond. In considering climate change and development budgets, the business case for adapting to climate change and the risks and opportunities of adaptation are set out.

**Part 2** applies the UKCIP 'Risk, uncertainty and decision making framework' to planning policy and development decisions. It provides guidance on how to select appropriate ways of adapting to climate change in response to development objectives, the risks associated with climate change impacts which will vary according to the

location, and other local criteria. A key message is to choose ways to adapt which will have benefits for other sustainability objectives. This means ensuring adaptation measures do not contribute to additional carbon emissions, but do contribute to enhanced biodiversity, enhancement of the public realm, and regeneration, for example.

**Part 3** provides generic guidance for developers and planners on planning and development responses to climate change impacts. It focuses on how to integrate the need to adapt to climate change into planning policy, the location of development, site layout and building design, issues to address and examples of possible adaptation responses. Some of the cost and benefit considerations relating to adaptation at the location, layout and building scale are explored.

**Part 4** provides examples of how mixed use developments in town and city centres and as urban extensions can adapt to climate change impacts. It illustrates how the three case study schemes are seeking to adapt to climate change, as well as other adaptation measures which could be considered.

See:

[http://www2.defra.gov.uk/research/project\\_data/More.asp?I=GA01073&M=KWS&V=cr  
oss+regional&SUBMIT1=Search&SCOPE=0#Doc](http://www2.defra.gov.uk/research/project_data/More.asp?I=GA01073&M=KWS&V=cr oss+regional&SUBMIT1=Search&SCOPE=0#Doc)