

Mayor of London's

# Draft Climate Change Adaptation Strategy

## Sustainability Appraisal Report Part A: Appendices



February 2010

Prepared for the Greater London Authority

by

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with Centre for Research in Environment and Health (CREH)

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## ABBREVIATIONS

ABI	Association of British Insurers	IIA	Integrated Impact Assessment
AQMA	Air Quality Management Area	IPCC	Intergovernmental Panel on Climate Change
BAP	Biodiversity Action Plan	km	Kilometre
BAU	Business as usual	LCCP	London Climate Change Partnership
BAU+50	Future business as usual in 50 years time	LDA	London Development Agency
BME	Black and minority ethnic	LDF	Local Development Framework
BREEAM	BRE Environmental Assessment Method	LDD	Local Development Document
CAMS	Catchment Abstraction Management Strategy	LDEPA	London Fire and Emergency Planning Authority
CCAS	Climate Change Adaptation Strategy	LHC	London Health Commission
CCAS	Climate Change Adaptation Strategy	LSC	London Skills Council
CEP	Collingwood Environmental Planning	LSDC	London Sustainable Development Commission
CET	Central England temperature	MEP	Member of the European Parliament
CFMP	Catchment Flood Management Plan	MPA	Metropolitan Police Association
CIWEM	Chartered Institution of Water and Environmental Management	MPS	Metropolitan Police Service
CIRIA	Construction Industry Research and Information Association	NO <sub>2</sub>	Nitrogen Dioxide
CO <sub>2</sub>	Carbon Dioxide	NO <sub>x</sub>	Nitrogen Oxides
CO <sub>2</sub> e	Carbon Dioxide Equivalent	ODPM	Office of the Deputy Prime Minister
COMEAP	Committee on the Medical Effects of Air Pollution	OFWAT	Office of Water Services
CREH	Centre for Research into Environment and Health	PLA	Port of London Authority
CSO	Combined sewer overflow	PM10	fine particulate matter
DCLG	Department for Communities and Local Government	PPG	Planning Policy Guidance
DCLG	Department for Communities and Local Government	PPS	Planning Policy Statement
DEFRA	Department for Environment Food and Rural Affairs	RBMP	River Basin Management Plan
DMA	District metering area	RFRA	Regional Flood Risk Appraisal
DTI	Department of Trade and Industry	RPHG	Regional Public Health Group
EC	European Commission	SA	Sustainability Appraisal
EDS	Economic Development Strategy	SAC	Special Areas of Conservation
EEA	European Environment Agency	SEA	Strategic Environmental Assessment
EEC	European Economic Community	SFRA	Strategic Flood Risk Assessment
EqIA	Equalities Impact Assessment	SOER	State of the environment report
EU	European Union	SPA	Special Protection Area
FoE	Friends of the Earth	SPG	Supplementary Planning Guidance
GCSE	General Certificate of Secondary Education	SSSI	Sites of Special Scientific Interest
GLA	Greater London Authority	SUDS	Sustainable Drainage Systems
GOL	Government Office for London	SWMP	Surface Water Management Plan
GP	General practitioner	TE2100	Thames Estuary 2100
HIA	Health Impact Assessment	TfL	Transport for London
HMG	Her Majesty's Government	UHI	Urban Heat Island
HSE	Health and Safety Executive	UK	United Kingdom
		UKCIP	United Kingdom Climate Impacts Programme
		UKCP09	UK Climate Projections 2009
		UKWIR	UK Water Industry Research
		WFD	Water Framework Directive
		WHO	World Health Organisation
		WRMU	Water Resources Management Unit

# APPENDICES

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## **SUSTAINABILITY APPRAISAL SCOPING REPORT CONSULTEES**





## Sustainability Appraisal Scoping Report Consultees

Formal consultation on the Scoping Report ran for five weeks in June – July 2006. The consultees formally consulted on the Scoping Report (including as part of the SEA determination process set out in Regulation 9) as required by the SEA Regulations were:

- Countryside Agency\*
- English Heritage\*
- English Nature
- Environment Agency\*

Other consultees included internal departments within the GLA and members of external organisations. The full list of consultees has been included in the Table below. Those that responded are marked with an asterisk. Details of these comments are included in Appendix 2.

Name	Organisation
David Fell	Chair LSDC GLA sub-group
June Barnes	Chair LSDC
Peter Head	Chair Planning and Development subgroup
Lesley Harding	GLA sub-group
Richard Stephenson	GLA sub-group
Dinah Cox	GLA sub-group
Andrew Judge	Planning and Development sub-group
Paul de Zylva	LSDC Commissioner / Director FoE
Peter Lainson	RADAR
David Hammond*	Countryside Agency
Roger Chapman	Government office for London
Richard Stephenson	TfL (Dir HSE)
Judith Salomon	London First
Peter Eversden	London Forum of Amenity Societies
Robin Stott*	Planning and development sub-group
Penny Bramwell	Planning and Development sub-group
Nigel Bell	GLA sub-group
Shaun McCarthy	GLA sub-group
Peter Massini	English Nature
Nicola Whittle*	Environment Agency
Paul Plant	Regional Public Health group
Alan Byrne	English heritage
Marian Larragy	London Civic Forum
Nannerl Herriott	Regional Public Health Group
Emma Syncott	GLA
Niall Machin	GLA
Ben King	Environment Agency
Nicky Conway	Forum for the Future



## **SUMMARY OF CONSULTEES COMMENTS ON THE SUSTAINABILITY APPRAISAL SCOPING REPORT**



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## Summary of Consultees Comments on Sustainability Appraisal Scoping Report

The following table summarises the comments and issues raised by the formal consultation on the SA Scoping Report.

Consultee / Topic	Comments
<b>PEOPLE AND HEALTH</b>	
<b>Governance</b>	
Robin Stott (London Sustainable Development Commission)	<p>a) We must be very careful in our use of terms like uncertainty. Scientific research is by definition uncertain, as scientists spend most of their time trying to improve on present knowledge. The fact that change of all sorts is inevitable and unpredictable means in scientific terms that present knowledge is always conditional and uncertain. At a more profound level every action in our life is mired in uncertainty, so we are all well used to uncertainty. That anthropogenic climate change is happening, and is a serious issue, is as 'certain' as many other issues, and we need to reflect that in our language.</p> <p>b) I am not at all sure where we get the evidence that increasing knowledge by itself changes behaviour. To get change of the magnitude we need, knowledge has to be interpreted into, and reinforced by legislative change.</p> <p>c) all the evidence I know of points to the fact that convivial, liveable communities are more equal communities in terms of their share of resources. To ensure that liveability survives our attempts at Adaptation and mitigation in London, we will have to address the problems of disparity in access to resources. Much of what this document speaks about will help, but I think we need to be up front about this. If we remain a profoundly unequal city, the danger is that the powerful and influential will build gated 'adapted' communities in the same way as some are already building gated housing communities. This is a recipe for disaster.</p>
<b>Education and Awareness</b>	
Nannerl Herriott Public Health Manager (Urban Development, Regional Public Health Group - London)	Link between cc and education in schools/further education etc not mentioned. Link to GLA powers around skills and training to give people skills in green technologies and cc adaptation. Also link to volunteering should be made.
<b>Health and Well-being</b>	
Robin Stott (London Sustainable Development Commission)	<p>I am afraid that I have a profound philosophical disagreement with choosing health. There is overwhelming evidence that legislative policy Can and Should make people healthier. Why otherwise do we have clean air programmes, anti smoking programmes, legislation on seat belts, drinking etc. Many of these are indirect effects. In the same way building convivial communities where people know each other, walk and bicycle, and buy locally sourced foods have major impacts on health, and need to be driven by government policy. Choosing health lets government off the hook by pretending to give individuals choice that they cannot make unless there is effective government policy. The question we need to ask choosing health advocates is how they think individual choice leads to the more equal social and less damaging environmental society which is a prerequisite for health</p> <p>The adaptation document's interpretation of the choosing health mantra is much better than the original. Do we even have to mention choosing health?</p>

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Consultee / Topic	Comments
	To reiterate, the ultimate health benefit is having a more equal society, and this absolutely depends on government policy.
Nannerl Herriott Public Health Manager (Urban Development, Regional Public Health Group - London)	<p>Issues related to water shortages are not picked up e.g. link between lack of water/poor personal hygiene and spread of infectious disease. There are also service delivery issues health and social care linked to water shortages. Issues related to urban heat island, high night time temp and health are not covered. Need for safe 'cool' temp in health and social care for vulnerable patients and need for air conditioning. Link between occupational safety and overheating and need for temp control to be designed into working environments.</p> <p>Health and wellbeing- will it promote healthy lifestyles, walkability and access to green space</p>
Nannerl Herriott Public Health Manager (Urban Development, Regional Public Health Group - London)	<p><b>Chapter 2 (Approach to Sustainability Appraisal for the Mayor's CCAS)</b></p> <p>States that health will be integrated into the SA/SEA process and that an HIA will not be conducted. I would support the integration of health into the SA/SEA but there need to be a clear process for involving health and feeding health into all aspects of the SA/SEA. We need to agree:</p> <ul style="list-style-type: none"> <li>• The process for integrating health into the SA/SEA</li> <li>• who will represent health (RPHG/GLA etc)</li> <li>• how health input will be provided for the appraisal process (if health consultants are appointed we would like to comment on their terms of reference)</li> </ul> <p>If you are setting up a steering group to manage the SA/SEA we would like to be represented on the steering group. It wouldn't be appropriate for us to agree not to have an HIA of the climate change adaptation strategy unless we have a clear and agreed strategy for integrating health into the SA/SEA.</p>
<b>Safety and Security</b>	
Nannerl Herriott Public Health Manager (Urban Development, Regional Public Health Group - London)	<p>Should include fear of crime. You have not mentioned the Olympics in any of chapters, which is strange as it is such a big issue for London and will happen in the lifetime of your adoption framework, how is it being addressed?</p> <p>You have not mentioned housing in any of the chapters. It provides a useful prompt for lots of issues about the use of space, link to people, service and the environment. Again it will be a big issue for London over the course of the cc adaptation strategy.</p> <p>Safety and security - include fear of crime</p>
<b>PLACE</b>	
<b>Liveability and place</b>	
Nannerl Herriott Public Health Manager (Urban Development, Regional Public Health Group - London)	<p>Include access to green space (another win/win for health and climate change)</p> <p>Liveability and place- will it create and sustain vibrant and diverse communities/will it increase provision of key local services (including access to healthy food) facilities and employment opportunities/access to green and tranquil space</p>
<b>Accessibility and Availability</b>	
Robin Stott (London Sustainable Development)	Despite the appropriate term (accessibility is much preferable to transport) the emphasis is still on mass transport. Surely an opportunity is to create new environments where access is possible through walking/cycling, and where new ideas about working locally are developed ( for instance-A 'library' where people whose work is predominantly electronic could together so that they would have companionship, but not have

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Consultee / Topic	Comments
Commission)	<p>to travel everyday to their various firms/workplaces).</p> <p>We must stop predicating development on transport links—the primary aim is surely local conviviality and fulfilment, with the need to travel further as an important but definitely secondary consideration-If we, our food, waste and resources go on travelling as at present, neither mitigation nor adaptation will be successful. We must stress the joys, importance and virtue of moving toward local production/consumption/work/cycles.</p>
Nannerl Herriott Public Health Manager (Urban Development, Regional Public Health Group - London)	<p>You recognise rightly that access is not simply about transport but the discourse just relates to transport issues, should also include access issues e.g. building social infrastructure in flood plain. Also more reference to walking and cycling issues (i.e. win/win of reducing pollution and improving physical activity)</p>
<b>Landscape, Historic and Cultural Environment</b>	
Robin Stott (London Sustainable Development Commission)	<p>If we have more tourists how are they going to get here without enhancing the problems of climate change?</p>
Clare Craig (Regional Planning Advisor, English Heritage)	<p>English Heritage is pleased with the inclusion of the Historic Environment as a Sustainability Objective but would like to see it titled as “Historic Environment” rather than the “Historic &amp; Cultural Environment”. All of the matters discussed under the heading “Historic &amp; Cultural Environment” at pages 20 and 38 of the report relate to the historic environment alone and the inclusion of “&amp; Cultural” seems only to reduce the clarity of the objective. The plans and programmes table at page 10 of the document refers to the objective as “Built and Historic Environment” and does include some specifically housing related plans and programmes. Moving those plans into the “Sustainable Development and Construction” section and renaming number 6 as simply “Historic Environment” could resolve this.</p> <p>Similarly, at page 38, the clarity of the text for the objective and appraisal criteria are reduced by the inclusion of “&amp; cultural”. Consequently, English Heritage would like to see the objective reworded to read as follows:</p> <p style="padding-left: 40px;">“To recognise, enhance and protect the historic environment.”</p> <p>The appraisal criteria could then be reworded as follows:</p> <ul style="list-style-type: none"> <li>• “Does it recognise, protect and have the potential to enhance buildings, sites and features of historic value?”</li> <li>• Will it conserve and potentially enhance the character of historic town and cityscapes?</li> <li>• Will it encourage increased understanding of and engagement with the historic environment?”</li> </ul> <p>English Heritage suggests that the elements of the appraisal criteria that are eliminated in this rewording could be included in the objective concerning “Liveability and Place”.</p>
<b>Biodiversity</b>	
Andy Deacon (GLA)	<p>London is expected to experience the same degree of climate change as the rest of the South East of England but it’s urban morphology means that the impacts of climate change will be felt more acutely [just on biodiversity?]. [suggest re-wording this – not convinced about the degree of equivalence and acuteness] The hotter, drier conditions will benefit some species and be detrimental to others.</p> <p>Frosts? Phenological changes?</p>

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Consultee / Topic	Comments
	<p>[Challenges section is all about impacts, but opportunities section assumes active management of issues. Should it be re-phrased as “challenges from climate change” and “opportunities through adaptation”? – need to make sure these sections are balanced in the right way – some people might not see potentially large amounts of spending on improved flood risk management as an opportunity].</p> <p>Even at national Government level, very little consideration had been given to the interrelationship between air quality and climate change. Climate change may increase the frequency of poor air quality episodes during the summer, but reduce the frequency of such events during the winter.</p>
<p>David Hammond (Countryside Agency)</p>	<p>The final appraisal criteria states "will it protect and enhance access to open and green spaces?" - This would appear to indicate existing spaces and would be welcome by the Countryside Agency, but does not appear to include new open/green space provision.</p> <p>Biodiversity, green roofs, public transport (cycling and walking), and air quality are mentioned - these can be assisted and aided by the provision of new and support to existing green/open spaces, there is also the health and amenity benefits of these publicly open areas, and whilst there are mentioned in the Scoping Report it appears as if they have been included as an afterthought.</p> <p>The opportunity to act as carbon traps, provide health and exercise opportunities for people (through leisure or alternative walking and cycling routes) does not seem to be fully expressed. These open/green spaces can be added to and supplement green roofs, recycling potential and education in promoting walking and cycling for health opportunities as well as providing mitigation for potential flood risk and a general amenity opportunity for residents, workers and visitors to London.</p>
<p>Pete Massini (English Nature)</p>	<p>London has a wide variety (deleted: predominantly artificially collection) of habitats, represented by woodland, (deleted: encapsulated countryside) grasslands, brownfield sites, remnant marshes, public parks and private gardens. This diversity (deleted: of this habitats) is a legacy of centuries of development and redevelopment of London.</p> <p>London is expected to experience the same degree of climate change as the rest of the South East of England but its urban morphology means that the impacts of climate change will be felt more acutely. The hotter, drier conditions will benefit some habitats species and be detrimental to others.</p> <p>Some habitats and species are protected by regulation and legislation<sup>1</sup>. The conservation of the special interest of these sites is paramount.</p> <p>Challenges:</p> <ul style="list-style-type: none"> <li>• Changes in temperature, rainfall, etc alters the ‘climate space’ to which a habitat or species has adapted. The habitat or species is unable to respond (by moving or migrating) if it occurs in isolated, fragmented sites.</li> <li>• The increasing intensity of rainfall events and the impermeability of the urban realm will increase the number of pollution events caused by combined sewer overflows</li> <li>• Higher summer temperatures could increase photochemical smog resulting in damage to sensitive habitats and species (e.g. the important lichen communities of Epping Forest)</li> </ul> <p>Opportunities:</p>

<sup>1</sup> There are 5 European sites designated under the Habitats Directive or Birds Directive and 38 sites designated under the Wildlife and Countryside Act.



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Consultee / Topic	Comments
	<p>Adaptation options such as greenroofs and sustainable urban drainage (SUDs_schemes) can (deleted: will) provide valuable additional (deleted: brownfield) habitat.</p> <p><b>5C: Appraisal Criteria, suggested indicators and baseline information</b></p> <p><b>Biodiversity</b></p> <p><b>Appraisal Criteria</b></p> <p>Will it conserve and enhance habitats and provide for the long-term management of natural habitats and wildlife? (Deleted: and in ways in which will aid adaptation to climate change?)</p> <p>Will it result in features that creates habitat that can contribute towards climate change adaptation?</p> <p>Will it protect and enhance access to open and green spaces? Comment: delete from here (because it has no direct link to biodiversity conservation per se) and add to Objectives 8 and/or 10.</p>
<p>Nannerl Herriott Public Health Manager (Urban Development, Regional Public Health Group - London)</p>	<p>Useful to include: <b>Biodiversity</b>-promote, educate and raise awareness of enjoyment of natural environment</p>
<b>Air Quality</b>	
<p>Robin Stott (London Sustainable Development Commission)</p>	<p>Challenges-I am far from convinced about the possibility of outdoor noise on hot summer evenings leading to closure of windows—wont most people be outside, and even if they are not, I wonder about this. It's not my experience of France/Italy. What's the evidence? Indeed time spent outside seems to me to increase the conviviality of neighbourhoods.</p> <p>I don't understand the first opportunity/benefit</p>
<p>GLA Air Quality Team</p>	<p><b>Links to Other Plans, Programmes and Strategies Table</b></p> <p><b>Air Quality</b></p> <p>European Commission (1996) Air Quality Framework Directive [SHOULD WE INCLUDE THE THEMATIC STRATEGY ON AIR QUALITY?] [SHOULD WE INCLUDE THE NEW AIR QUALITY DIRECTIVE, WHICH IS CURRENTLY GOING THROUGH THE EUROPEAN PARLIAMENT?] DETR (2000) The air quality strategy for England, Scotland, Wales and Northern Ireland. Working together for clean air [SHOULD WE INCLUDE THE CONSULTATION ON THE NATIONAL AIR QUALITY STRATEGY?] The Mayor's transport strategy (and transport strategy revisions [2004 &amp; 2006]) (2001) Cleaning London's air: the Mayor's air quality strategy (and air quality strategy revisions [2006]) (2001) (2002)</p> <p>Poor air quality damages health and the quality of life of Londoners, particularly affecting the most vulnerable in society – the very young, the very old, and those experiencing negative social equity. London has some of the worst air quality in the UK, frequently exceeding national and EU air quality objectives for monitored air quality pollutants. It was predicted (deleted is estimated) that over one thousand premature deaths</p>

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Consultee / Topic	Comments
	<p>and a similar number of hospital admissions occurred due to particulate pollution (deleted poor air quality) in London in 2005. Thousands more suffer less severe ill health, exacerbated by air pollution.</p> <p>Very little consideration had been given to the interrelationship between air quality and climate change [NOT SURE THIS IS TRUE - WHAT ABOUT E.G. MY WORK &amp; AQEG? DO YOU MEAN IN TERMS OF STRATEGIES?]. Climate change may increase the frequency of poor air quality episodes during the summer, but reduce the frequency of such events during the winter.</p> <p>Challenges:</p> <ul style="list-style-type: none"> <li>• An increase in summertime photochemical smog and the frequency of ozone episodes linked to increasing temperatures and small reductions in cloud cover (and associated increase in solar radiation)</li> <li>• Rain 'strips' airborne pollutants from the air– reduced summer rainfall will therefore lead to worse air quality</li> <li>• Higher temperatures will encourage the use of air conditioning in road vehicles and other modes of transport – air conditioning increases fuel consumption and hence increases the production of exhaust gases</li> <li>• Ozone precursors are produced by some vegetation [THINK THIS IS POTENTIALLY IMPORTANT ENOUGH FOR ITS ONE BULLET POINT]</li> <li>• High ozone levels can stunt plant growth</li> <li>• Warmer weather may encourage more people to spend time outdoors, especially on warm summer evenings. The increased noise generated may mean that people don't open windows to ventilate properties and internal air quality suffers (note that this may also encourage air conditioning) [IMPACT OF INDOOR AIR QUALITY ALSO LIKELY TO BE AFFECTED BY DESIGN OF BUILDINGS &amp; VENTILATION (INCLUDING IMPACT OF RETROFITTED AIR CONDITIONING), BADLY DESIGNED/INSTALLED/MAINTAINED AIR CONDITIONING SYSTEMS (CURRENTLY RESPONSIBLE FOR MOST CASES OF LEGIONNAIRE'S DISEASE), ETC. SADLY NOT JUST BECAUSE WE FANCY DINNER IN THE GARDEN!]</li> </ul> <p>Opportunities / benefits</p> <ul style="list-style-type: none"> <li>• More fine weather will encourage people to spend time outside [THIS IS ONLY A BENEFIT IF OUTDOOR AIR QUALITY DOESN'T DAMAGE THEIR HEALTH]</li> <li>• Deleted: street trees can intercept airborne particulate matter, improving air quality (and providing other infrastructural benefit) [NOT ENOUGH TO BE SIGNIFICANT I'M AFRAID]</li> <li>• Less need for winter heating could lead to lower emissions from boilers and power generation processes.</li> </ul>
<b>CLIMATE CHANGE</b>	
<b>Climate Change and Energy</b>	
Andy Deacon (GLA)	London uses as much energy as Portugal and Ireland and through its energy demands is responsible for 7.5% (deleted 2.3) of the UK's total CO <sub>2</sub> emissions [UK in its entirety is only 2% of global emissions on basis of Govt stats].

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Consultee / Topic	Comments
Robin Stott (London Sustainable Development Commission)	The section on energy illustrates the problems of this kind of sectoral approach.-A key additional opportunity here is that climate change promotes the move to generation of locally( and ultimately renewably) produced and managed energy systems, all of which are mayoral policies. This improves energy efficiency, means that if some energy facilities stop working the damage is limited, gives people greater control over their locality, provides new jobs, saves, and may even make money , and increase the amount of dialogue between people at a local level. Even if global warming were irrelevant what sane person would follow any other course?
Nannerl Herriott Public Health Manager (Urban Development, Regional Public Health Group - London)	<b>Energy</b> -will it reduce demand for and use of energy
<b>WATER MANAGEMENT</b>	
<b>Water Quality and Quantity</b>	
Andy Deacon (GLA)	<ul style="list-style-type: none"> <li>• Reduced supply and increased demand will require improved water management - Londoners currently use more water per capita than the UK or EU average</li> <li>• Fixing miss-connections helps reduce diffuse pollution and improves water quality in local watercourses, making them more resilient to climate change [is this a challenge?]</li> </ul>
Robin Stott (London Sustainable Development Commission)	Should we be measuring the number of houses/facilities which are using grey water, or is this assumed to be counted in the overall amount of water which each person/household uses.
<b>WASTE MANAGEMENT AND RESOURCES</b>	
Robin Stott (London Sustainable Development Commission)	The potential impact on packaging makes no reference to London's food policy which essentially promotes the development of local production and consumption cycles which should obviate the need for most packaging!
<b>ECONOMY</b>	
Robin Stott (London Sustainable Development Commission)	This is tricky because international global commerce is likely to radically decrease with the problems of peak fuel and climate change coming together. I am not sure we can assume that we can insulate the city from these pressures. so mitigation and adaptation mean something more for our financial centres. Surely we have to reflect this in a document which sets out London's direction for the next 50 years? However there will probably be new advantages—for instance preferential investment in new green industries (London's scientific and technical excellence base is unrivalled), and with our dealing in the carbon cap and trade market which will inevitably have to develop over the next few years. Perhaps a better mitigation and adaptation policy for the city is to anticipate and lead these new developments (for instance supporting the Contraction and Convergence model).

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Consultee / Topic	Comments
<b>OTHER</b>	
Robin Stott (London Sustainable Development Commission)	<p><b>Introduction</b></p> <p>If the gulf stream shuts down, the situation in the uk may be very different from the one portrayed. Adaptation strategies need to cope with as many eventualities as possible. The key one which is missing is the possibility of EXTREMELY cold winters in the event of a gulf stream closure.</p> <p><b>Chapter 1 (Sustainable Development)</b></p> <p>The three objectives are said to be interwoven, but the use of the term economic growth is still worrying. I appreciate its in the mayors strategy, but I thought we had moved to a position where we said 'economic progress, not necessarily associated with growth', or words to that effect. Does the term interwoven mean that the objectives are pursued in synergy? What happens if economic growth exceeds environmental limits, or causes increasing inequity, both of which are present consequences of economic growth. Don't we need to add our synergistic clause, or mention virtuous cycles? Otherwise any thoughtful reader will wonder at our naivety. ( but see later in chapter 5)</p> <p><b>Chapter 2 (Approach to Sustainability Appraisal for the Mayor's CCAS)</b></p> <p>I say again the framework doesn't mention economic growth, so if we have used it as a template, we shouldn't have been talking about growth!</p> <p><b>Chapter 5 Sustainability Appraisal Objectives</b></p> <p>(This chapter) answers these questions (see chapter 1 comments above)—I think we should put the italicised statement in chapter 5 right at the start of the paper-This will in my view assert our creative insistence that we want synergistic thinking, and give us credibility from the opening statement-a credibility which could be impaired if the present chapter 1 is not modified.</p> <p><b>5B : Context for each of the SA Objectives</b></p> <p>In the opportunity sections, we should emphasise the job creation possibilities of each of the initiatives. For instance grey water recycling will require a large number of people to be trained in the necessary techniques of plumbing this into our old housing stock—what a moment to be an entrepreneur!</p> <p><b>Other thoughts</b></p> <p>Water —should we be measuring the number of houses/facilities which are using grey water, or is this assumed to be counted in the overall amount of water which each person/household uses.</p> <p>Air—Where do, or should we, monitor methane from landfill sites etc. And is CO2 now a pollutant or not?</p> <p>Energy-should we be monitoring the development of local community energy services. This would include locally produced energy as an appraisal criteria</p> <p>How many houses/facilities are carbon negative( i.e. exporting on balance more renewably generated energy to the grid than consumed )</p> <p>Accessibility. Can we work up a criteria which looks at the extent to which people no longer have to travel to meet most of their needs?</p> <p>Economics—is there a way of finding out how many new green enterprises have started up. Or how much local councils and others have supported green industry start ups.</p> <p>Liveability and space, education and governance health and safety.</p>

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Consultee / Topic	Comments
	Children's 'education' is in my view a central feature here. Effective preschool and primary services for children have enormous pay off in the medium to long term. We see this in Scandinavia, particularly Sweden. In the UK the closest we get is sure start and allied programmes. Shouldn't we have as an aspiration to have sure start available to ALL children in London, and a indicator to see how we are doing? This single move will arguably do more for our society over the next 20 years than anything else, helping as it does the appropriate socialisation of children. I am not sure which of the sections it falls into, but I think that measuring the availability and uptake of sure start would be helpful.
Max Dixon (GLA)	<p><b>5B : Context for each of the SA Objectives</b></p> <p>Page 14, third opportunity (and page 16, 29): 'Warmer weather will encourage people to spend more time outside...' Recent media reports suggest that visits to open spaces like Kew fell during the heat wave. Experience in many permanently hotter cities, e.g. Sao Paulo, is that people actually stay under cover during peak of day, and outdoors is used in evenings, i.e. may be a time shift rather than more time in total.</p> <p>Page 16 - penult challenge: 'The increased noise generated may mean that people don't open windows to ventilate properties and internal air quality suffers' Experience, e.g. southern Europe is that people do open windows, and suffer the noise, since overheating is more acutely distressing for most people than noise.</p> <p>'Air conditioning and cooling' should be presented as a distinct challenge, for both higher electricity peak load, and Noise (e.g. on page 17, or under SDC or possibly under 'Liveability and Place') if sustainable alternatives are not successfully promoted, or conventional systems not much better designed and managed.</p> <p>Page 24, Challenges – Is the exposure of London to the impact of possible international/national policy responses to climate change a distinct issue, e.g. aviation fuel tax hitting London harder because of greater dependence on long distance tourism...?</p> <p>Page 25, Issues, para 2 - comment on community cohesion is controversial and doesn't seem specifically related to climate change.</p> <p>Page 26 - could acknowledge that reluctance to take individual action is a rational compositional response; doesn't mean people aren't ready for strong political leadership, e.g. through tax system, so everyone carries burden of adjustment fairly.</p>
David Hammond (Countryside Agency)	Broadly speaking the Countryside Agency supports the Climate Change Adaptation Strategy; however there appears to be little mention of green/open space provision or enhancement in the objectives.
GLA Air Quality Team	<p><b>5C: Appraisal Criteria, suggested indicators and baseline information</b></p> <p><b>Appraisal Criteria</b> [WE SHOULD INCLUDE THE NEW EU &amp; NATIONAL LEGISLATION IF POSSIBLE, OTHERWISE THIS WILL BE OUT OF DATE VERY SHORTLY AFTER PUBLICATION]</p> <p><b>Evidence base</b> Between Nov 96 - Dec 2003 particulate concentrations decreased by 19%, NOx &amp; carbon monoxide concentrations fell by 33% and 53% respectively. Ozone concentrations increased by 43%. Nitrogen dioxide concentrations fell by 6%</p> <p>[WHAT? WHERE HAS THIS COME FROM? DO YOU WANT MORE UP TO DATE INFO?]</p>
Pete Massini (English)	<b>Chapter 3 (Key Sustainability Issues for London)</b>

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<p>Nature) Nannerl Herriott Public Health Manager (Urban Development, Regional Public Health Group - London)</p>	<p>The climate change issues were well covered and clearly expressed. On a general note the issues highlighted in the text are not always the same as the sustainability objectives and indicators in chapter 5, this was particularly noticeable later in the chapter e.g. for security and crime. I think that they should be aligned, if something is an issue it should be reflected in the objectives and if something is not an issues it should not be represented in the objectives.</p>
<p>Pete Massini (English Nature) Nannerl Herriott Public Health Manager (Urban Development, Regional Public Health Group - London)</p>	<p>I couldn't find any criteria linked to soil, I would have thought it would be important due to subsidence issues.</p>
<p>Clare Craig (Regional Planning Advisor, English Heritage)</p>	<p>On a broader note, the four headings for the Sustainability Objectives - Managing Resources, Getting Results, Taking Responsibility and Developing Respect, are clearly based closely on the layout of the London Plan but this connection is not made in this report. The way the document currently reads, these four headings could be identified as the key sustainability issues relating to climate change but if this is the case they seem unduly truncated without explanation. English Heritage, for example, is not clear as to why the historic environment should be placed in the "Getting Results" section rather than the "Managing Resources" section. This could be clarified by making the basis for grouping the sustainability objectives in this way explicit in the section on Sustainability Appraisal Objectives in Chapter 3 of the report.</p>
<p>Clare Craig (Regional Planning Advisor, English Heritage)</p>	<p>English Heritage notes that archaeological sites and other historic features will also be in the high risk flood zone and would like to see the first bullet point under the heading "Challenges" on page 20 altered to reflect this.</p> <p>English Heritage would also like to see the second bullet point under the "Challenges" heading on page 20 reworded as follows:</p> <p>"The feasibility of retrofitting historic buildings and conservation areas with micro-renewables to mitigate the effects of climate change without damaging their historic value."</p> <p>English Heritage would prefer to see London's historic housing stock retrofitted with micro-renewable technologies than lose vast swathes of it, and all the historic character of London it embodies, due to a false perception that such buildings are not, or could not, easily be rendered energy efficient. In terms of the expense of retrofitting, it must be remembered that the historic environment is by its very nature an investment of embodied energy. Demolishing and replacing historic buildings and features rather than adapting them for reuse therefore effectively represents a waste of that energy investment that should be factored in when costing demolition and rebuilding.</p> <p>English Heritage is of the view that a challenge posed by climate change is not to waste the energy investment that the historic environment represents but to save it by adapting it for new uses. This also creates an opportunity to protect existing historic housing stock by retrofitting it with micro-renewable technologies rather than demolishing and replacing it. There is an associated opportunity to avoid wasting the energy investment represented by buildings on the London Register of Buildings at Risk by ensuring that they are restored and given an active use.</p> <p>On the topic of micro-renewable technologies and the historic environment, it is worth advising that from now until the end of 2007, English Heritage is producing a range of technical advice documents on this topic. The first of these relates to wind generators and is due to be published shortly, and publications concerning solar panels, heat pumps and small scale bio-fuel conversions are due before the end of the year.</p> <p>English Heritage has also noted that government grant funds for the installation of micro-renewable technologies will require demonstration that</p>

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	<p>steps have been taken to ensure that the property is as energy efficient as possible. Consequently, English Heritage will also shortly publish a document concerning ways to make historic buildings energy efficient including such matters as loft and floor insulation and draft exclusion measures.</p> <p>English Heritage has recently contributed comments about the retro-fitting of historic buildings with micro-renewables to the Scoping Report for the Sustainability Appraisal of the Proposed Amendments to the London Plan. In these we highlighted the following points:</p> <p>“Some coverage of these issues [micro-renewables and this historic environment] can be found in our publication Climate Change and the Historic Environment (enclosed) and this includes a specific passage on micro-renewables at page 4 as follows:</p> <p>Some micro-renewables, such as mini wind turbines, or micro combined heat, and power plants, are unlikely to present problems if sensitively located;</p> <p>others, such as visually intrusive photo-voltaic arrays, may be more difficult to accommodate on an historic building.</p> <p>Not all alterations to historic buildings are referable to English Heritage and so it is clearly desirable to develop guidance for the addition of micro-renewable technologies to historic buildings. English Heritage is seeking changes to the regulations in the Town and Country Planning (General Permitted Development) Order 1995, as amended by the Town and Country Planning (General Permitted Development) (Amendment) Order 1998 to enable the appropriate addition of micro-renewables to the historic building stock. This order and its amendment currently emphasise the importance of the sensitive siting and appearance of the devices, such as satellite dishes, on listed buildings or buildings in conservation areas.”</p> <p>It could therefore also be an opportunity “to adapt historic buildings and buildings in conservation areas to maximise their energy efficiency in a way that protects their historic values and encourages their continued use”.</p>
<b>Indicators</b>	
Andy Deacon (GLA)	<p>‘deeply concerned about the proposed indicators - but again, would appreciate clarification of whether these are intended as indicators of the sustainability of the strategy itself or indicators of adaptation (if there's a difference!) - I'd have about a tenth of the number that you have got and even then most of them would be heavily caveated - but as you know from previous discussions over a long period of time the adaptation indicator debate won't be solved in this document alone. I'm not sure what scope we have to re-jig this section (we clearly can't undermine lots of suggestions from the SA stakeholder meeting, if that's where they came from) but I'd welcome the opportunity to do this when the time is right' (email).</p>
Robin Stott (London Sustainable Development Commission)	<p>Are admittedly a nightmare. Given the primacy to sustainability of a more equal share of social, economic and environmental resources, should we not have overarching indicators reflecting this? I have previously suggested that an indicator of overall CO2 emissions (with over the years a subindicator of the amount of CO2 emitted by individuals) to reflect environmental change, with a gini coefficient to reflect socio-economic change should be incorporated as headline indicators in all London Policies. (Incidentally, mayoral sign up to the introduction of Contraction and Convergence would help in the development of this more equal society, so perhaps an indicator showing the progress towards the acceptance and implementation of this policy would be innovative and a good idea.)</p>
Pete Massini (English Nature)	<p>Comment on existing indicators: these are useful indicators to assess the efficacy and impact of spatial planning but they won't tell much about the efficacy and impact of the CCAS, additional indicators added (below)</p> <p>Condition of SSSIs [N.B. water resource issues, air pollution, etc. are identified as reasons for unfavourable condition as part of systematic monitoring of SSSIs]</p> <p>Population and distribution of key indicator species (actual species tbc)</p>

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	<p>Tree health [N.B. this might be a useful proxy and is information collated by Forestry Commission and/or Borough Tree Officers?] Biological quality of rivers (though this is picked up in Objective 2)</p>
<p>Clare Craig (Regional Planning Advisor, English Heritage)</p>	<p><b>Evidence and Indicators</b></p> <p>English Heritage suggests the following as additional evidence for the historic environment objective:</p> <ul style="list-style-type: none"> <li>• Greater London Sites and Monuments Record;</li> <li>• The Schedule of Buildings of Architectural and Historic Interest (listed buildings);</li> <li>• London boroughs' conservation area records and adopted guidance (including conservation area designation reports, statements, appraisals and design guidance);</li> <li>• London boroughs' lists of Locally Listed Buildings (or equivalent);</li> <li>• The Register of Historic Parks and Gardens</li> <li>• The London Buildings at Risk Register;</li> <li>• The HELM website <a href="http://www.helm.org.uk">www.helm.org.uk</a>; and</li> <li>• The Heritage Counts website <a href="http://www.heritagecounts.org.uk">www.heritagecounts.org.uk</a>.</li> </ul> <p>In addition, the Museum of London Archaeology Service Monograph series of reports provides a wealth of evidence about London's archaeology. These include specific consideration of the impact of fluctuating levels of the River Thames. Cumulatively the reports provide a very significant evidence base of the archaeology that could be affected by climate change.</p> <p>Finally, English Heritage can update some of the figures provided from our Heritage Counts 2005 publication with the numbers that will be used in Heritage Counts 2006 which is due for publication in November. The amendments are as follows:</p> <ul style="list-style-type: none"> <li>• 164 scheduled monuments;</li> <li>• 955 conservation areas;</li> <li>• 148 registered parks and gardens; and</li> <li>• 40 urban public parks.</li> </ul> <p>For the avoidance of doubt the other numbers remain the same. This necessitates changes to pages 20 and 38 of the report. The references would also, obviously, need to be updated to read 2006 rather than 2005.</p>



## **TERMS OF REFERENCE OF SA ADVISORY GROUP**



# **Sustainability Appraisal of the GLA's Water Strategy and Climate Change Adaptation Strategy**

## **Sustainability Appraisal Advisory Group Terms of Reference**

The Greater London Authority (GLA) is preparing a Water Strategy (WS) and Climate Change Adaptation Strategy (CCAS) for London. In order to be consistent with European Directive 2001/42/EEC and the Mayor's policies the GLA is building strategic environmental appraisal (SEA), sustainability appraisal (SA) and health impact assessment (HIA) into both strategy preparation processes. These processes are being combined into one integrated SA process.

To aid the SA process, the GLA is establishing a SA Advisory Group. It will also act as an independent voice in the process. This will ensure that process is seen to be rigorous and open.

The Advisory Group will:

1. comment on the scope of the appraisals and SA methodology being employed and ensure the requirements of SEA, SA and HIA are integrated;
2. guide, inform and comment on the appraisals at each main stage;
3. attend meetings at which aspects of the appraisals are undertaken;
4. guide on stakeholder involvement as part of the SAs;
5. advise where there are differences of opinion between stakeholders; and
6. ensure that there is consistency between the GLAs SAs, where appropriate, and that lessons from other GLA SAs are incorporated and lessons from these SAs are disseminated.

The working arrangements of the Advisory Group will be:

- A. the Advisory Group will be chaired by the GLA;
- B. the Advisory Group members will be drawn from the Statutory Environment Bodies and key stakeholders, including the London Sustainable Development Commission and the London Health Commission plus the GLA and its functional bodies;
- C. the Advisory Group will meet regularly during the appraisal process (up to four times) and well as engaging in correspondence and commentary on draft SA outputs via email.



## **SUSTAINABILITY APPRAISAL FRAMEWORK**



# Sustainability Appraisal Framework

## CCAS Sustainability Appraisal Objectives and Criteria

SA Objective	Appraisal Criteria
<b>People and health</b>	
<b>1. Governance</b> To deliver objectives transparently and effectively over the long-term, focussing on outcomes and informed by good evidence	a) Will it fully account for the implications of policy and practice over the lifetime of its implementation and for future generations? b) Will it pursue a cross-sectoral partnership approach wherever appropriate e.g. the London Climate Change Partnership? c) Will it ensure that all relevant stakeholders are involved in formal and informal decision making? d) Will it appraise, monitor and review outcomes effectively? e) Will it provide information that enables individuals and organisations to make informed choices and take responsibility for their actions? (e.g. to respond appropriately in extreme weather events, adopt adaptation measures in their homes and reduce CO <sub>2</sub> emissions) f) Will it position London as an international role model in adapting to climate change?
<b>2. Education and Awareness</b> To maximise the education and awareness levels of the population in order to empower individuals to take responsibility	a) Will it improve educational opportunities and facilities for formal, informal and vocational learning or training? b) Will it promote respect and responsibility for the wise management of natural resources and the environment in general? c) Will it encourage greater awareness amongst individuals of their collective impact and help share knowledge more widely? d) Will it encourage taking responsibility and behavioural changes by individuals, communities, private companies and the public sector to help achieve sustainable development, including adaptation to climate change?
<b>3. Health and Well Being</b> To maximise the health and well being of the population and reduce inequalities in health	a) Will it improve health, including physical and mental health and social wellbeing? (e.g. urban heat island effects, air pollution, positive mental effects of physical exercise) b) Will it reduce poverty and health inequalities? c) Will it improve access to high quality public services including health facilities? d) Will it promote healthy lifestyles, including physical activity, sport and recreation and the development of healthy workplaces?(e.g. walking in parks / urban areas) e) Will it improve wider determinants of health e.g. housing and employment?
<b>4. Equality and Diversity</b> To ensure equitable outcomes for all communities and to celebrate the unique ethnic and cultural diversity of London's citizens as London's key strength	a) Will it reduce poverty and social exclusion, particularly in the most deprived areas and communities? b) Will it promote a culture of equality, fairness and respect for all people and the environment? c) Will it ensure that the provision of essential services and infrastructure, such as water and wastewater services, does not increase social inequalities and poverty? d) Will it increase the affordability and range of tenure of housing and reduce homelessness? e) Will it minimise the impact of, for example, climate change on families overseas of immigrants in London?
<b>5. Safety and Security</b> To have a place where everyone feels at ease and is able to enjoy life and to enhance community safety	a) Will it reduce the risk of flooding now and in the future from all sources? b) Will it improve awareness of flooding and flood warnings in at risk communities? c) Will it improve the resilience of people and properties to climate change, including flood risk, subsidence, heat, wind and water shortages? d) Will it create the conditions which support the reduction in crime and improve public safety, including terrorism? e) Will it design buildings and the public realm to reduce crime and fear of crime? f) Will it reduce road traffic accidents? g) Will it ensure that London's growth does not increase vulnerability to climate change? h) Will it ensure that appropriate contingency planning is in place to manage

SA Objective	Appraisal Criteria
	emergency events, including extreme weather, water shortages and flooding, and the recovery after such events with particular consideration of vulnerable groups?
<b>Place</b>	
<b>6. Liveability and Place</b> To create and sustain liveable, mixed use physical and social environments that promote long-term social cohesion, sustainable lifestyles and a sense of place	a) Will it improve the provision and quality of facilities and infrastructure for the enjoyment of the local environment, including open space? b) Will it promote social cohesion and encourage engagement in community activities? c) Will it enhance quality of the local environment and the public realm? d) Will it improve the aesthetics of the local environment? e) Will it help to make people feel positive about the area where they live?
<b>7. Accessibility and Availability</b> To maximise accessibility to key services and amenities and to increase the proportion of journeys made by public transport, walking and cycling	a) Will it encourage a modal shift to more sustainable forms of transport as well as encourage greater efficiency? b) Will it enable access to buildings and places and transport systems in the long-term, including in the event of flooding and extreme weather? c) Will it reduce traffic volumes and congestion? d) Will it protect and enhance access to and improve the quality of open space? e) Will it improve access to services and amenities for those with greatest need / for those whom access presents the greatest challenges?
<b>8. Landscape, Historic and Cultural Environment</b> To enhance and protect the landscape and built and cultural environment, including buildings, townscape and the public realm	a) Will it recognise, protect and have the potential to enhance sites, features and areas of historical, archaeological and cultural interest? b) Will it conserve and potentially enhance landscape and townscape / cityscape character, including historical, archaeological and cultural value / potential and visual amenity? c) Will it protect and enhance open space and the quality of the public realm? d) Will it encourage increased understanding of and engagement with the historic environment?
<b>9. Biodiversity</b> To conserve and enhance natural and semi-natural habitats and wildlife	a) Will it conserve and enhance natural and semi-natural habitats and wildlife, including providing for their long-term management? b) Will it result in features that creates habitat that can contribute towards climate change adaptation? c) Will it increase and enhance the resilience of London's key priority habitats and species in line with the Biodiversity Action Plan's long-term vision and objectives? d) Will it encourage the replacement of valuable aquatic or water related habitats and/or species that have been lost or are in decline (where appropriate under the BAP and/or predicted climate change), or if not appropriate the creation of new habitats? e) Will it encourage the promotion of biodiversity and educational opportunities? f) Will it facilitate access to biodiversity? g) Will it encourage the protection and creation of green corridors and green infrastructure, including along river corridors or waterways, and the interconnectivity of habitat corridors?
<b>10. Air Quality</b> To improve both indoor and outdoor air quality	a) Will it improve indoor air quality? b) Will it improve outdoor air quality? c) Will it reduce emissions to air? d) Will it help to achieve national and international standards for air quality, as well as local air quality management targets?
<b>Climate change</b>	
<b>11. Climate Change and Energy</b> 11.1. To mitigate the causes of climate change, including to reduce consumption of energy at source, achieve greater energy efficiency and to reduce reliance on fossil fuels for transport, heating, cooling, energy and electricity	11.1. <i>To mitigate the causes of climate change:</i> a) Will it reduce emissions of greenhouse gases? b) Will it help London meet its emissions reductions targets? c) Will it avoid exacerbating the impacts of climate change? d) Will it reduce the need to travel? e) Will it reduce energy consumption and demand? f) Will it improve energy efficiency, including in buildings? g) Will it increase the proportion of energy both purchased and generated from renewable sources? h) Will it improve the security of energy supply? i) Will it promote local community energy services?  11.2. <i>To adapt to the effects of climate change:</i>



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SA Objective	Appraisal Criteria
11.2. To adapt to the effects of climate change	<ul style="list-style-type: none"> <li>j) Will it reduce the vulnerability / increase the resilience of communities, infrastructure and buildings to the effects of climate change? (e.g. flooding, extreme weather events, droughts, subsidence etc.)</li> <li>k) Will it ensure that new, refurbished and retrofitted development and infrastructure is located, designed and constructed to withstand the effects of climate change (e.g. flooding, water scarcity, subsidence, heat) over its design life?</li> <li>l) Will it improve emergency planning for extreme events (see also objective 5)?</li> </ul>
<b>Water management</b>	
<b>12. Water Quality and Water Resources</b>  12.1 To improve the quality of surface waters and groundwater  12.2 To improve the security of supply and to achieve the prudent management and efficient/prudent management and sustainable use of water resources	<ul style="list-style-type: none"> <li>a) Will it help achieve a good ecological status?</li> <li>b) Will it reduce diffuse pollution?</li> <li>c) Will it improve the water systems infrastructure e.g. water supply/sewerage and ensure these will be in place before new development?</li> <li>d) Will it reduce the abstraction of water from the environment?</li> <li>e) Will it encourage the prudent and efficient use of water?</li> <li>f) Will it promote reuse and recycling of water, for example in the design of housing?</li> <li>g) Will it promote sustainable urban drainage?</li> <li>h) Will it promote improved hygiene and good health through sufficient / affordable water?</li> </ul>
<b>Waste management and resource use</b>	
<b>13. Waste Management</b> To minimise the production of waste across all sectors in line with the waste hierarchy and minimise the use of non-renewable materials	<ul style="list-style-type: none"> <li>a) Will it minimise the production of waste?</li> <li>b) Will it promote reuse and recycling of waste?</li> <li>c) Will it promote the disposal of residual waste in a sustainable manner?</li> <li>d) Will it lead to reduced consumption of materials and resources?</li> <li>e) Will it help to promote a market for recycled products?</li> <li>f) Will it minimise the spread of disease?</li> </ul>
<b>Economy</b>	
<b>14. Economy</b> To develop the economy in ways which meets society's present and future needs	<ul style="list-style-type: none"> <li>a) Will it improve the resilience of business and London's economy to environmental change, including the local and global challenges and opportunities of climate change?</li> <li>b) Will it help provide employment in the most deprived areas?</li> <li>c) Will it help stimulate regeneration and housing for those in greatest need?</li> <li>d) Will it generate satisfying and rewarding work in the long-term?</li> <li>e) Will it encourage investment in new technologies, new solutions and research and development to help achieve sustainable development?</li> <li>f) Will it avoid unreasonable costs on business?</li> </ul>



## **EVALUATION OF SUSTAINABILITY EFFECTS AND SIGNIFICANCE CRITERIA**

## Significance Criteria

A set of 'generic' significance criteria has been developed to provide guidance to help in scoring the significance of potential effects (see below). These criteria provide a degree of transparency as to the reasoning behind allocating individual scores within the appraisal, such that anyone reading the SA Report should be able to understand the rationale underlying the score, even if they do not entirely agree with the score given.

It is important to recognise that the creation of pre-determined significance criteria is not a substitute for applying expert judgement:

- Completeness will never be possible, nor appropriate. Significance criteria are broad, and provide guidance to arriving at significance judgements rather than offer an accurate scale or series of thresholds. Such thresholds may be possible, but only in specific cases or projects and at small geographical scales, where, for example specific impacts and receptors can be both identified and understood.
- Significance criteria will be case and location specific. Separate criteria need to be developed for each SA.
- Expert judgement and local knowledge will remain a key and fundamental aspect of appraisal and significance scoring. Even when a scale or set of significance criteria have been developed, a series of judgements will still be required to decide the likely level of the effect(s) of a particular policy drawing on the evidence base available.
- Given this, differences of opinion and inconsistency remain possible. In particular the complexity surrounding predicting the effects of implementing a particular policy will remain even where significance criteria are introduced. Indirect, cumulative and long-term effects are still likely to lead to uncertainty, and different appraisers may still assign divergent scores in the same circumstances.

Note that the criteria for a particular significance of effect category (major positive, minor positive, neutral etc) are not meant to be exhaustive. They are intended to provide guidance on the scores assigned during the appraisal, to ensure transparency and consistency of scoring. A score can be assigned without all the criteria within a significance of effect category being met – it would generally be assigned if one or more of the categories are met. They are not intended to be used as checklist, which suggests a level of accuracy in scoring which is simply not possible in most strategic appraisals.

Note that the scores assigned for the impacts of the Draft Strategy in isolation (i.e. predicted effects on sustainability of the draft Strategy as an initial framework for adaptation) were used slightly differently from the rest of the appraisal. Here more of an indication of direction against the SA objectives was being sought rather than a more detailed appraisal of change against the baseline.

## Significance Criteria

Score	Description	General Comments <sup>2</sup>
<b>Major Positive (++)</b>	<p>A proposal or policy very likely to lead to a significant opportunity / improvement, or a series of long-term improvements, leading to large-scale and permanent benefits to the sustainability objective being appraised.</p> <p>A proposal or policy that will affect positively a large number of people.</p> <p>A major positive effect is also likely to have cumulative and indirect beneficial impact and / or improve conditions outside London.</p>	<p>Major positive effects must be justified with description of the impacts likely to lead to a major beneficial effect.</p> <p>Significant effects are those which either impact a large amount on a specific receptor or group or potentially have smaller impact but on a particularly sensitive or important receptor or group, for instance deprived or vulnerable groups.</p> <p>Significance may also relate to existing targets set locally, regionally or nationally, such as for flood risk reduction, sustainable construction, air quality improvement etc.</p> <p>An example of a major positive on a climate change adaptation objective would be a policy, proposal, etc. that made a major contribution to reducing flood risk in London.</p>
<b>Minor Positive (+)</b>	<p>A proposal or policy likely to lead to moderate improvement in both short and long-term, leading to large scale temporary, or medium scale permanent benefits to the objective being appraised.</p> <p>Even where beneficial effects are felt to be temporary, they should not be easily reversible (to detriment of objective) in the long-term.</p> <p>A minor positive effect may halt or reverse historic negative trends.</p>	<p>Minor positive scores should be justified with description of the impacts likely to lead to a beneficial effect.</p> <p>Commentary may be appropriate on how a minor positive could be strengthened and / or any uncertainties and factors which have led to a minor as opposed to major positive effect being recorded.</p>
<b>Neutral (0)</b>	<p>A proposal or policy which is unlikely to have any beneficial or negative impact / effect on the objective being appraised in either the short, or long-term.</p> <p>This may include the continuation of a current trend – thus the condition of an issue may continue to decline / improve, however the appraiser's judgement is that the item is having no effect on the current trend.</p>	<p>Neutral effects should only be used where it is very likely that the effect will be neither positive, nor negative, or that a positive or negative change is not sufficiently significant to warrant a 'minor' score.</p> <p>Where positive and negative effects are likely to cancel each other out this should be recorded as 'mixed' see below, rather than neutral.</p> <p>A neutral effect is not the same as 'uncertain', where an appraiser is not sure if an effect is likely to be positive or negative, or 'mixed', where the appraiser feels that the effects are likely to be both positive and negative (see below for more detail).</p>
<b>Minor Negative (-)</b>	<p>A proposal or policy likely to lead to moderate damage / loss in both short and long-term, leading to large-scale temporary, or medium scale permanent negative impact on the objective.</p> <p>A proposal or policy which may also have limited cumulative and indirect detrimental impact and / or limited degradation of conditions outside the specific policy or project area.</p> <p>A minor negative effect may halt or reverse historic positive trends.</p> <p>It is also likely that it will be possible to mitigate or reverse a minor negative effect through policy or project intervention.</p>	<p>Minor negative effects should be considered able to be mitigated through policy.</p> <p>Commentary should be provided on how minor negative effects can be mitigated and / or reversed.</p>
<b>Major Negative (--)</b>	<p>A proposal or policy likely to lead to significant or severe damage / loss, or a series of long-term negative effects, leading to large-scale and permanent negative impacts on the sustainability objective being appraised.</p> <p>A proposal or policy affecting at least one person very negatively or negatively affecting a large number of people.</p> <p>A proposal or policy which may also have significant cumulative and indirect detrimental impact and / or degrade</p>	<p>Major negative scoring should be considered where effects are irreversible and difficult to mitigate.</p> <p>Significant effects are those which either impact a large amount on a specific receptor or group or potentially have smaller impact but on a particularly sensitive or important receptor or group.</p> <p>Where effects are uncertain, but there is some probability of a significant negative impact, a precautionary approach to scoring will be applied.</p> <p>Major negative scores should be recorded without taking into account potential for mitigation, since there is no guarantee that any mitigation measures (policies) will be implemented or</p>

<sup>2</sup> Examples of water resources and water quality effects are used here, but these comments should be reflected across the application of the criteria for each objective.

Score	Description	General Comments <sup>2</sup>
	<p>conditions outside London.</p> <p>A proposal or policy, which is likely to threaten environmental thresholds / capacities in areas already under threat.</p> <p>The detrimental effects of the proposal or policy will be hard to reverse and are unlikely to be easily mitigated through policy or project intervention.</p>	<p>successful. In all cases where major negative scores are assigned, policy improvement recommendations should be made.</p>
<b>Mixed</b> <b>(e.g. +/-, +/- etc.)</b>	<p>The effect is likely to be a combination of beneficial and detrimental effects, particularly where effects are considered on sub-issues, areas or criteria.</p>	<p>Such mixed and effects will be hard to predict, but could be significant in the long-term, or when taken with other effects (cumulative).</p> <p>A mixed effect may also be combined with an uncertain score (?) where the relative balance of effects, or the nature of the effects remains uncertain.</p>
<b>Uncertain</b> <b>(?)</b>	<p>The effect of a proposal or policy cannot be, or is not known or is too unpredictable to assign a conclusive score. The appraiser is not sure of the effect.</p> <p>Where the effect is genuinely uncertain an uncertain score should be assigned rather than attempt to give a positive, negative or neutral score. Uncertainty should be acknowledged rather than attempt spurious accuracy, which is likely to result in greater divergence amongst different appraisers.</p>	<p>This may be the case where a policy covers a range of issues, or where the manner in which a policy is implemented will have a material impact on the effects it will have.</p> <p>Equally it may be the case that there is insufficient evidence, information or expertise to come to a satisfactory conclusion about whether an effect is likely to be positive or negative.</p> <p>In these circumstances commentary should be provided as to how the policy may be improved / clarified to ensure a positive effect.</p>

## **REVIEW OF KEY POLICIES, PLANS, PROGRAMMES AND GUIDANCE**





## Review of Key Policies, Plans, Programmes and Strategies

The table below lists policies, plans, programmes and strategies which are relevant to the SA of the draft CCAS. The review of policies, plans and programmes sought to draw out:

- Areas where there is policy overlap between the CCAS and other plans or policies;
- Targets, guidelines and parameters set out in other relevant strategies and plans, particularly those at a higher level (e.g. UK Government or EU level);
- Key issues for the CCAS and the Sustainability Appraisal to consider.

The review focused on London level policies, plans and programmes, as well as those at a national level which are particularly relevant to the SA of the CCAS or are relatively recent and therefore may not yet be reflected in London level policies, plans and programmes. No European Directives or other international documents have been reviewed as any targets and legislation they contain should have already been included in National and London plans and programmes.

Note that this review was completed in December 2009. It is possible therefore that additional policies, plans, programmes and strategies have been adopted or developed since this date.

Policies, Plans, Programmes, and Strategies	Relevance to the Climate Change Adaptation Strategy and its Sustainability Appraisal
<b>International and Government</b>	
<p>IPCC (2007) <i>Climate Change: Impacts Adaptation and Vulnerability</i></p> <p><a href="http://www.ipcc.ch/ipccreports/ar4-wg2.htm">http://www.ipcc.ch/ipccreports/ar4-wg2.htm</a></p>	<p><b>Relationship with CCAS</b></p> <p>The IPCC represents the highest level source of information and collated research on climate change. Its reports and meetings are a key driver of international and national policy. This report (selected due to direct relevance to adaptation) is one of a large number produced by the IPCC. The nature of these reports is such that much of the information and data are aggregated to a level (global and regional) that is much higher than may be of direct relevance to the CCAS. In addition the findings of this and other IPCC reports should have been considered in the preparation of UK national and London regional policies relating to climate change – many of which are reviewed below.</p> <p>This report sets out in some detail the “current scientific understanding of the impacts of climate change on natural, managed and human systems, the capacity of these systems to adapt and their vulnerability”. Divided into chapters which consider issues (e.g. water, food, health) and regions (Africa, Asia, Europe).</p> <p>The “Europe” chapter – which can be read as a standalone report – is the most relevant to the CCAS. It provides an overview of “key future impacts and vulnerabilities” and “adaptation: practices, options and constraints” in relation to a broad range of resource and social issues, including energy and transport, human health etc.</p> <p>IPCC reports seek to be “policy neutral” and do not therefore set a policy precedent or any objectives or targets which the CCAS should adhere to. However the background information and consideration of adaptation options may, in particular, be of use in drafting specific chapters.</p> <p><b>Influence on SA</b></p> <p>Although data and information contained is aggregated to the European level, the SA can draw on the Europe chapter in particular for high level baseline information, and in the development and appraisal of options in the CCAS. Sections outlining “adaptation: practices, options and constraints” for relevant issues will be the main source for this (especially water resources, biodiversity, energy and transport, tourism and recreation, property insurance and human health).</p>

Policies, Plans, Programmes, and Strategies	Relevance to the Climate Change Adaptation Strategy and its Sustainability Appraisal
	<b>Context topics: All</b>
<p>WHO (2003) <i>Climate Change and Human Health: Risk and Responses Summary</i>  <a href="http://www.who.int/globalchange/publications/cchhsummary/en/">http://www.who.int/globalchange/publications/cchhsummary/en/</a></p>	<p><b>Relationship with CCAS</b>  This report is a summary of a book of the same title published by WHO in collaboration with UNEP and WMO.  It seeks to set out the actual or likely impacts of climate change on health and how society and governments should respond – with a particular focus on the health sector.  As a high level report this does not set out specific policy objectives or targets which set a precedent for the CCAS. However the report does contain relevant information on likely health effects of climate change impacts, and how government might respond. This information may be somewhat high-level for the CCAS.  Figure 10.1 (page 25) provides a very useful summary of impacts, outcomes and data needs to monitor health effects of climate change – this may be very useful in consideration of monitoring proposals for the CCAS in relation to health.  <b>Influence on SA</b>  While specific data are at a global aggregated level, analysis of impacts and responses provides useful high-level information which can inform the baseline, and assist the appraisal of CCAS policies and options as these develop.  <b>Context topics: 1. People and health, 3. Climate change</b></p>
<p>HM Government (2008) <i>The Planning Act</i>  <a href="http://www.opsi.gov.uk/acts/acts2008/ukpga_20080029_en_1">http://www.opsi.gov.uk/acts/acts2008/ukpga_20080029_en_1</a></p>	<p><b>Relationship with CCAS</b>  The Act introduces a new system for decision making in relation to nationally significant infrastructure planning, for example nuclear power stations, with additional reforms to the town and country planning system. Decisions will be based on National Policy Statements. It also provides for a Community Infrastructure Levy on new developments to support key infrastructure delivery.  Relevant key areas covered by the Planning Act include:</p> <ul style="list-style-type: none"> <li>• There will be a new Community Infrastructure Levy on developments to finance infrastructure. The aim is to raise money from developers to pay for facilities needed as a consequence of new developments, such as schools, hospitals and sewage plants.</li> </ul> <p><b>Influence on SA</b>  Limited influence on the SA, but the Community Infrastructure Levy may be a useful tool in assisting London boroughs to deliver infrastructure required to reduce flood risk, such as SUDS.  <b>Context topics: 4. Water management.</b></p>
<p>EEA (2006) <i>Vulnerability and Adaptation to Climate Change in Europe</i>  <a href="http://reports.eea.europa.eu/technical_report_2005_1207_144937/en/EEA_Technical_report_7_2005.pdf">http://reports.eea.europa.eu/technical_report_2005_1207_144937/en/EEA_Technical_report_7_2005.pdf</a></p>	<p><b>Relationship with CCAS</b>  Focus is at European and national level, however provides detailed analysis of key climate change vulnerabilities (in Europe) and activities and options for adapting to climate change impacts. The aim “is to identify challenges for climate change adaptation strategies and measures in Europe”.  In Section 3 vulnerability is assessed in a sectoral manner – focussing on natural environment sectors and socio-economic sectors (specifically, tourism, human health and energy)  Section 4 is of relevance to the CCAS as it discusses “adaptation policies and practices”. However the focus in this document is on national policy.  The report is not a policy document and does not set a policy precedent that the CCAS should follow, however Section 4 in particular may be important in considering adaptation policy options.  <b>Influence on SA</b>  May provide useful information in development of baseline – particularly related to the socio-economic and environmental sectors addressed.  Section 4 may be a useful resource in the development, and assessment of policy options for the CCAS.  <b>Context topics: 1. People and health, 3. Climate change, 4. Water management, 6. Economy</b></p>
<p>HM Government (2005) <i>Securing the future – the UK Government Sustainable Development Strategy</i>  <a href="http://www.DEFRA.gov.uk/sustainable/government/publications/uk-strategy/index.htm">http://www.DEFRA.gov.uk/sustainable/government/publications/uk-strategy/index.htm</a></p>	<p><b>Relationship with CCAS</b>  Sets the highest-level Government strategic priorities and framework in relation to Sustainable Development.  <ul style="list-style-type: none"> <li>• Supporting sustainable development is a key role of the CCAS, and it should therefore, at the strategic level reflect the priorities and framework set out in the Sustainable Development Strategy.</li> </ul> </p>

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Policies, Plans, Programmes, and Strategies	Relevance to the Climate Change Adaptation Strategy and its Sustainability Appraisal
	<p><b>Influence on SA</b></p> <p>The SA seeks to ensure that the CCAS is as supportive of sustainable development as possible. The UK Government Strategy for Sustainable Development is a key document, setting the high-level background for appraisal.</p> <p>The SA will ensure that the CCAS is not in conflict with the Sustainable Development Strategy.</p> <p><b>Context topics: All</b></p>
<p>HM Government (2008) <i>Climate Change Act</i></p> <p><a href="http://www.DEFRA.gov.uk/environment/climatechange/uk/legislation/docs.htm">http://www.DEFRA.gov.uk/environment/climatechange/uk/legislation/docs.htm</a></p>	<p><b>Relationship with CCAS</b></p> <p>The Climate Change Act became law on 26th November 2008. It is intended to provide a clear, credible and long-term framework for tackling climate change.</p> <p>The Act includes a series of legally binding targets: Green house gas emission reductions through action in the UK and abroad of at least 80% by 2050, and reductions in CO<sub>2</sub> emissions of at least 26% by 2020, against a 1990 baseline. The 2020 target will be reviewed soon after Royal Assent to reflect the move to all greenhouse gases and the increase in the 2050 target to 80%. The Act also includes provisions to enable the introduction of a domestic emissions trading scheme.</p> <p>Two key aims underpinning the Act:</p> <ul style="list-style-type: none"> <li>• to improve carbon management and help the transition towards a low carbon economy in the UK; and</li> <li>• to demonstrate strong UK leadership internationally, signalling that the Government are committed to taking their share of responsibility for reducing global emissions in the context of developing negotiations on a post-2012 global agreement at Copenhagen 2009.</li> </ul> <p>It aims to reduce carbon dioxide emissions via the following key provisions:</p> <ul style="list-style-type: none"> <li>• Setting legally binding targets</li> <li>• Establishing a carbon budgeting system</li> <li>• Creation of a Committee on Climate Change</li> <li>• Creating enabling powers</li> <li>• Reporting requirements</li> </ul> <p>It is important that the Strategy is developed in line with targets and aims of the Climate Change Act.</p> <p><b>Influence on SA</b></p> <p>The SA may advise on potential conflicts with the Climate Change Act.</p> <p><b>Context topics: 3. Climate change</b></p>
<p>HM Government (2006) Climate Change and Sustainable Energy Act</p> <p><a href="http://www.opsi.gov.uk/ACTS/acts/2006/20060019.htm">http://www.opsi.gov.uk/ACTS/acts/2006/20060019.htm</a></p>	<p><b>Relationship with CCAS</b></p> <p>This Act sets out policy related to:</p> <ul style="list-style-type: none"> <li>• Greenhouse gas emissions reductions (including building regulations compliance)</li> <li>• Fuel poverty</li> <li>• Microgeneration promotion</li> <li>• Heat and energy from renewable sources</li> <li>• Renewables obligation for generation and supply of electricity</li> </ul> <p>The main focus is thus climate change mitigation.</p> <p>There is limited direct relevance to the CCAS, however Article 19 - 21 provides support for community energy projects, local energy saving measures and renewable heat. These may provide useful policy direction for the CCAS.</p> <p><b>Influence on SA</b></p> <p>Limited influence – does not contain specific data, information or targets.</p> <p><b>Context topics: 3. climate change, 5. Waste and resources</b></p>
<p>Defra (2006) <i>Climate change. The UK Programme 2006</i> and Defra (2008) <i>Annual Report to Parliament</i></p> <p><a href="http://www.DEFRA.gov.uk/environment/climatechange/uk/ukccp/index.htm">http://www.DEFRA.gov.uk/environment/climatechange/uk/ukccp/index.htm</a></p>	<p><b>Relationship with CCAS</b></p> <p>The UK climate change programme sets out the Governments' policies and priorities for action in the UK and internationally. The focus of the programme is primarily on climate change mitigation, with targets set for reduction in CO<sub>2</sub> emissions as well as objectives for a number of mitigation activities.</p> <p>However Section 3 has as its focus adaptation. This chapter sets out some high-level information on climate change impacts and the need for adaptation and sets out a</p>

Policies, Plans, Programmes, and Strategies	Relevance to the Climate Change Adaptation Strategy and its Sustainability Appraisal
	<p>commitment to produce a UK Adaptation Policy Framework. The Framework aims "to provide a consistent approach to building adaptation into policies".</p> <p>The programme does not set out any direct policy related to adaptation however.</p> <p>The Annual Report to Parliament describes the final estimates for the UK's greenhouse gas emissions during 2007 and provisional estimates for 2007, and for the period 1 June 2007 to 31 May 2008 the steps taken by the government to reduce emissions. There is a section on adaptation which details the actions the government is taking to facilitate adaptation to climate change.</p> <p><b>Influence on SA</b></p> <p>The programme provides some useful data and information relating to climate change in the UK context, and sets out the Government's priorities and policy relating (particularly) to mitigation. The SA will ensure that the CCAS is not in conflict with these. In addition, the Annual Report provides useful background information related to what adaptation initiatives are under way.</p> <p><b>Context topics: 3. Climate change</b></p>
<p>Defra (2008) <i>Adapting to Climate Change in England – A framework for action</i>  <a href="http://www.defra.gov.uk/environment/climatechange/adapt/pdf/adapting-to-climate-change.pdf">http://www.defra.gov.uk/environment/climatechange/adapt/pdf/adapting-to-climate-change.pdf</a></p>	<p><b>Relationship with CCAS</b></p> <p>The Framework sets out what the government has already done and what it will be doing to help England adapt to changes predicted as a result of climate change. It describes what these impacts are likely to be, and how the impacts of a changing climate will affect;</p> <ul style="list-style-type: none"> <li>• Critical national infrastructure,</li> <li>• Healthcare,</li> <li>• Households,</li> <li>• Natural environment,</li> <li>• Land based economy,</li> <li>• Wider economy.</li> </ul> <p>The Framework also includes the justification for why the country should adapt, and sets out the main components of the Adapting to Climate Change Programme 2008 – 2011. These include;</p> <ul style="list-style-type: none"> <li>• Providing the evidence,</li> <li>• Raising awareness, and helping others take action,</li> <li>• Ensuring and measuring progress,</li> <li>• Government policy and process: embedding adaptation.</li> </ul> <p><b>Influence on SA</b></p> <p>The SA will ensure that the CCAS is in line with the priorities and recommendations of the Framework.</p> <p><b>Context topics: (primarily) 3. Climate change, (indirectly) all.</b></p>
<p>Met office / Defra (2004) <i>Uncertainty, risk and dangerous climate change</i>  <a href="http://www.metoffice.gov.uk/publications/brochures/">http://www.metoffice.gov.uk/publications/brochures/</a></p>	<p><b>Relationship with CCAS</b></p> <p>As a research paper with a global climate change focus, this report is of relevance to the CCAS only as evidence and in support of policy. Given that it dates from 2004, more recent research material at the UK and London level is likely to be available – such as that supporting the UK Programme 2006, and recent reports by the London Climate Change Partnership (reviewed under London section below).</p> <p>The particular focus of this report is on uncertainty and risk of particular impacts, and this may be useful background to policy development.</p> <p><b>Influence on SA</b></p> <p>The SA may draw upon some of the conclusions of this report in relation to the likelihood of particular impacts, however it is probable that the focus of this research is more technical than would be appropriate for appraisal purposes.</p> <p><b>Context topics: 3. Climate change</b></p>
<p>ODPM (2004) <i>The planning response to climate change. Advice on better practice</i>  <a href="http://www.communities.gov.uk/archived/publications/planningandbuilding/planningresponse">http://www.communities.gov.uk/archived/publications/planningandbuilding/planningresponse</a></p>	<p><b>Relationship with CCAS</b></p> <p>This is an advice document, and thus does not present actual planning policy guidance. However it does set out (at 2004) "an overview of the current thinking and state of knowledge on the planning response to climate change" for planning professionals.</p> <p>The document is aimed at planning professionals and local authorities putting together strategies to address climate change. Sets out five overarching "points": act now, make the links, spread the word, make the best use of existing tools, make effective use of existing instruments.</p>

Policies, Plans, Programmes, and Strategies	Relevance to the Climate Change Adaptation Strategy and its Sustainability Appraisal
	<p>The focus of the document is planning and development, thus it is narrower in focus than the CCAS.</p> <p>The advice and guidance this document provides is at higher level of detail than the CCAS (which is more strategic) will be able to incorporate. However this will provide very useful input into CCAS policy in specific areas (particularly related to spatial and development planning, and in relation to local authorities). In addition Section 4. Implementation, includes information on Regional Planning Bodies role in “influencing decisions and alerting and informing the public and developers about the need to respond to climate change”.</p> <p><b>Influence on SA</b></p> <p>The SA can refer to this advice document during appraisal of the policies and options relating to planning and climate change, to ensure that the CCAS is in line with good practice and recommended policy.</p> <p><b>Context topics: 2. Place, 3. Climate change</b></p>
<p>DTI (2003) <i>Energy white paper. Our energy future: creating a low carbon economy</i>  <a href="http://www.dti.gov.uk/energy/policy-strategy/energy-white-paper-2003/page21223.html">http://www.dti.gov.uk/energy/policy-strategy/energy-white-paper-2003/page21223.html</a></p>	<p><b>Relationship with CCAS</b></p> <p>With its focus on a “low carbon economy” this white paper is concerned primarily with climate change mitigation. Adaptation to climate change is not in fact mentioned in the paper.</p> <p>As a result the white paper has an important role as context for the CCAS in relation to UK energy policy, but limited direct relevance in terms of policy and priorities for adaptation.</p> <p><b>Influence on SA</b></p> <p>Limited, however the SA will ensure that the CCAS is in line with the goals of this energy white paper, which are:</p> <p>A 60% cut in CO2 emissions by 2050; maintain reliability of energy supplies; promotion of competitive markets; and, ensure that every home is adequately and affordably heated.</p> <p><b>Context topics: 3. Climate change, 5. Waste and resources, 6. Economy</b></p>
<p>Office of Science and Technology (2004) <i>Foresight : Future Flooding</i>  <a href="http://www.foresight.gov.uk/OurWork/CompletedProjects/Flood/KeyInformation/Outputs.asp">http://www.foresight.gov.uk/OurWork/CompletedProjects/Flood/KeyInformation/Outputs.asp</a></p>	<p><b>Relationship with CCAS</b></p> <p>This project aimed to “use the best available science to provide a challenging vision for flood and coastal defence in the UK between 2030 and 2100, and so inform long-term policy”. It considers all types of flooding, so is of relevance to London. Results / findings are presented in 2 “volumes”</p> <p>In Volume 1 the project analysed future flood risks based on four scenarios. It also analyses these risks in the context of social, community and economic impacts.</p> <p>Volume 2 sets out in detail possible responses which can reduce future risks. Of particular relevance to the CCAS:</p> <p>Chapter 3: Responses to future intra-urban flood risks  Chapter 6: Quantifying flood management responses – intra-urban  Chapter 7: Sustainability implications of flood management  Chapter 8: Governance of flood management  Chapter 9: Strategic choices</p> <p>Volume I therefore provides useful background and context information in relation to flood risks (although focus is wider than London), and Volume II provides detailed analysis of responses to these risks, which the CCAS could draw upon in drafting policy related to flooding in London</p> <p><b>Influence on SA</b></p> <p>The SA can draw upon Volume I for baseline context – noting that the focus of this research is broader than London. Volume II may also be of use in developing and assessing policy options for the CCAS in relation to flood risks.</p> <p><b>Context topics: 3. Climate change, 4. Water management</b></p>
<p>Environment Agency (2008) <i>The Pitt review: learning lessons from the 2007 flood. Final Report</i>, and Defra (2008) <i>The Governments Response to Sir Michael Pitt's Review of the Summer 2007 Floods</i>  <a href="http://archive.cabinetoffice.gov.uk/pittreview/thepittreview/final_report">http://archive.cabinetoffice.gov.uk/pittreview/thepittreview/final_report</a></p>	<p><b>Relationship with CCAS</b></p> <p>The final Pitt review report represents the findings of an independent review into the UK floods of 2007.</p> <p>The review raised concerns about the quality and availability of flood risk information to both emergency services and the public. The Report contains a total of 92 final recommendations which although strategic in nature, have implications for London (and every city in England and Wales). In its response, the Government states that it “supports changes in response to all of the recommendations in the Review”. Where full implementation of any of the recommendations will need further consultation or</p>

Policies, Plans, Programmes, and Strategies	Relevance to the Climate Change Adaptation Strategy and its Sustainability Appraisal
<a href="#">.html</a>	<p>future legislation, the Government response sets out what will be done to achieve this and what will be done in the meantime to address the concerns behind the recommendation.</p> <p>Among the key recommendations the review calls for:</p> <ul style="list-style-type: none"> <li>• Treating flooding as an issue of strategic importance, akin to pandemic flu or terrorism.</li> <li>• The Environment Agency and Met Office should work together to improve their technical capability to forecast, model and warn.</li> <li>• Improving reporting and monitoring during major flood events.</li> <li>• Ensuring flood resilience measures are properly funded.</li> <li>• Establishing a national level Resilience Forum, to facilitate national level planning for flooding and other emergencies.</li> <li>• Establishing stable rather than ad-hoc financial mechanisms to respond to exceptional emergencies.</li> </ul> <p><b>Influence on SA</b></p> <ul style="list-style-type: none"> <li>• The SA can use the background information contained in the report, and the recommendations, as a source for the identification of issues and potential effects. If it is felt that the CCAS is in conflict with the principles of the recommendations the SA may suggest possible changes.</li> </ul> <p><b>Context topics: 2. People and health, 3.Climate change, 4.Water management</b></p>
<p>Defra (2008) Future Water – <i>The Governments Water Strategy for England</i>  <a href="http://www.DEFRA.gov.uk/environment/water/strategy/index.htm">http://www.DEFRA.gov.uk/environment/water/strategy/index.htm</a></p>	<p><b>Relationship with CCAS</b></p> <p>Launched in February 2008, the Strategy sets out the national policy framework for water resources and quality. It covers water quality, supply, demand management and efficiency and climate change adaptation and mitigation, with the aim of reducing demand and improving water quality.</p> <p>The vision of the Strategy is that by 2030 Defra will have;</p> <ul style="list-style-type: none"> <li>• improved the quality of our water environment and the ecology which it supports, and continued to provide high levels of drinking water quality from our taps;</li> <li>• sustainably managed risks from flooding and coastal erosion, with greater understanding and more effective management of surface water;</li> <li>• ensured a sustainable use of water resources, and implemented fair, affordable and cost reflective water charges;</li> <li>• cut greenhouse gas emissions; and</li> <li>• embedded continuous adaptation to climate change and other pressures across the water industry and water users.</li> </ul> <p>The Strategy describes a range of actions that will help to deliver the above vision</p> <ul style="list-style-type: none"> <li>• Any policies or proposals in the CCAS should conform with policies contained in the national strategy.</li> </ul> <p><b>Influence on SA</b></p> <p>The Strategy provides the national policy context for measures in the CCAS designed to promote climate change adaptation, and respond to the challenges posed by the predicted shortfall in water resources available in London. The Strategy includes information related to the current situation, and likely future pressures, for each of water demand, water supply, water quality in the natural environment, surface water drainage, river and coastal flooding, greenhouse gas emissions, charging for water and the regulatory framework, competition and innovation.</p> <p><b>Context topics: 3. Climate change, 4. Water management</b></p>
<p>Air Quality Expert Group (2007) <i>Air Quality and climate change: a UK perspective</i>  <a href="http://www.DEFRA.gov.uk/environment/airquality/publications/airquality-climatechange/index.htm">http://www.DEFRA.gov.uk/environment/airquality/publications/airquality-climatechange/index.htm</a></p>	<p><b>Relationship with CCAS</b></p> <p>This report provides a very detailed and technical (scientific) analysis of the relationship between climate change and air quality. In addition Chapter 5 sets out “mitigation measures”, sub-divided by sector (e.g. energy, transport).</p> <p>The level of detail and information included in this report is far greater than the CCAS will cover. However this provides an important source of information on the interactions between climate change and air quality, which is a significant issue in London, and thus for the CCAS.</p> <p>Chapter 5, in particular may be a useful resource in developing air quality related</p>

Policies, Plans, Programmes, and Strategies	Relevance to the Climate Change Adaptation Strategy and its Sustainability Appraisal
	<p>adaptation policy options for London.</p> <p><b>Influence on SA</b></p> <p>The SA can draw on the information and analysis presented in this report as baseline context information. Chapter 5 may also assist the appraisal of policy options related to air quality.</p> <p><b>Context topics: 1. People and health, 3. Climate change</b></p>
<p>Department of Health (2009) <i>Heatwave Plan for England</i> <a href="http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_099015">http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_099015</a></p>	<p><b>Relationship with CCAS</b></p> <p>Outlines what needs to be done to raise awareness of risks relating to severe hot weather, and the preparations that individuals and organisations should make to reduce these risks. Sets out responsibilities at national and local level for alerting people of heatwave announcements.</p> <p>In relation to climate change and adaptation the plan advocates longterm planning, which should include “year round joint working to reduce the impact of climate change and ensure maximum adaptation to reduce harm from heatwaves”. This should involve “influencing urban planning to keep housing, workplaces, transport systems and the built environment cool and energy efficient”.</p> <p>There is a description of the heat-island effect, how it occurs and the implications for urban areas.</p> <p>The CCAS should refer to the heatwave plan in relation to policies and priorities concerning adaptation to heatwave incidences in London.</p> <p><b>Influence on SA</b></p> <p>The SA will ensure that the CCAS supports the recommendations of the national heatwave plan, and can draw on the plan in the development and assessment of options for the CCAS.</p> <p><b>Context topics: 1. People and health, 2. Place, 3. Climate change</b></p>
<p>House of Commons: Environment, Food and Rural Affairs Committee 16<sup>th</sup> Report (2004) <i>Climate change, water security and flooding</i> <a href="http://www.publications.parliament.uk/pa/cm200304/cmselect/cmenvfru/558/558.pdf">http://www.publications.parliament.uk/pa/cm200304/cmselect/cmenvfru/558/558.pdf</a></p>	<p><b>Relationship with CCAS</b></p> <p>Sets out findings of the Committee in relation to the effects of climate change on water availability and flooding. The flooding chapter bases its’ analysis on the Foresight report reviewed above.</p> <p>A key message in relation to water availability is that “there is a pressing need for wider public understanding of the way that climate change may affect water use.”</p> <p>The water availability section sets out determinants of water use and recommendations for its reduction. Particularly relevant to the CCAS are sections on: reducing household water consumption; planning; and, reducing leakage.</p> <p>The conclusions and recommendations section is also of relevance to the CCAS as it sets out household and planning policy recommendations, which while advocated as national policy, will be of relevance to adaptation in London.</p> <p><b>Influence on SA</b></p> <p>The SA may wish to draw upon this report in the assessment and development of policy options for the CCAS.</p> <p><b>Context topics: 3. Climate change, 4. Water management</b></p>
<p>Defra (2009) <i>Draft Flood and Water Management Bill</i> (Consultation Draft) <a href="http://www.defra.gov.uk/environment/water/flooding/flow/index.htm">http://www.defra.gov.uk/environment/water/flooding/flow/index.htm</a></p>	<p><b>Relationship with CCAS</b></p> <p>The draft Bill is being prepared in response to the Pitt Review (2007) and the EU Floods Directive. It was published for consultation on the 21<sup>st</sup> April 2009 until the 24<sup>th</sup> July 2009.</p> <p>The draft Bill is designed to respond to the challenges of predicted climate change and population increase – an increase in water demand and more frequent extreme weather events, more widespread water stress, increased risk of drought, more water quality problems and a greater risk of flooding.</p> <p>The draft Bill will;</p> <ul style="list-style-type: none"> <li>• “deliver improved security, service and sustainability for people and their communities</li> <li>• clarify who is responsible for managing flood risk</li> <li>• protect essential water supplies</li> <li>• modernise the law for managing flood risk and reservoir safety</li> <li>• encourage more sustainable forms of drainage</li> <li>• enable water companies to control more non-essential uses of water during droughts</li> <li>• make it easier to resolve misconnections to sewers.”</li> </ul>

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	<p>The draft Bill should simplify, and improve the effectiveness of, managing the risk of flood and coastal erosion, improve the sustainability of water resources and protect against potential droughts. The result should be a healthier environment and better services and protection to water consumers.</p> <p><b>Influence on SA</b></p> <p>The draft Bill will make clear who is responsible for managing all sources of flood risk. The SA will draw on the draft Bill to ensure that recommendations related to adapting to flood risk reflect the draft Bill.</p> <p><b>Context topics: 4. Water management</b></p>
<p>ODPM (2005) <i>Planning Policy Statement 1: Delivering Sustainable Development</i>  <a href="http://www.communities.gov.uk/publications/planningandbuilding/planningpolicystatement1">http://www.communities.gov.uk/publications/planningandbuilding/planningpolicystatement1</a></p>	<p><b>Relationship with CCAS</b></p> <p>Sets out the Government's overarching planning policies on the delivery of sustainable development through the planning system. PPS1 will have been a major reference point in the development of the London Plan, and Local Authority LDDs in London.</p> <p>Requires development plans to address the potential impacts of climate change particularly through the design and location of developments. In relation to climate change, it recommends referral to The Planning Response to Climate Change (ODPM, 2004), reviewed above.</p> <p>The document divides policy guidance into:</p> <p>Social cohesion and inclusion; protection and enhancement of the environment; prudent use of natural resources; sustainable economic development; and, integrating sustainable development in development plans.</p> <p>It is important that the CCAS reflects and supports the high level policies set out in PPS1.</p> <p><b>Influence on SA</b></p> <p>The SA will ensure that the CCAS supports high level Government policy related to sustainable development, as set out in PPS1.</p> <p><b>Context topics: all</b></p>
<p>DCLG (2007) <i>Planning Policy Statement: Planning and Climate Change: Supplement to PPS1</i>  <a href="http://www.communities.gov.uk/archived/general-content/planningandbuilding/planningandbuilding/planningclosedconsultations/consultationplanningpolicy/">http://www.communities.gov.uk/archived/general-content/planningandbuilding/planningandbuilding/planningclosedconsultations/consultationplanningpolicy/</a></p>	<p><b>Relationship with CCAS</b></p> <p>This PPS supplement sets out how spatial planning should contribute to reducing emissions and stabilising climate change (mitigation) and how it should take into account the unavoidable consequences (adaptation). It sets out high level planning objectives to be taken into account by all planning authorities in the preparation and delivery of spatial strategies.</p> <p>As a supplementary document to PPS1, it should be read alongside this.</p> <ul style="list-style-type: none"> <li>The CCAS should draw upon the guidance and policy set out in this document.. This may be particularly relevant to policy and priorities relevant planning authorities in London.</li> </ul> <p><b>Influence on SA</b></p> <p>The SA can draw on the issues and direction set out in the PPS as background for the appraisal and for mitigation / enhancement.</p> <p><b>Context topics: 3. Climate change</b></p>
<p>DCLG (2001) PPG13: Transportation  <a href="http://www.communities.gov.uk/publications/planningandbuilding/ppg13">http://www.communities.gov.uk/publications/planningandbuilding/ppg13</a></p>	<p><b>Relationship with CCAS</b></p> <p>Sets out highest level spatial planning guidance in relation to transport – with the objectives of promoting sustainable transport choices, improving accessibility and reducing the need to travel, especially by car.</p> <p>Climate change and adaptation are not explicitly referred to in this PPG. However it is important that proposals and policy set out in the CCAS are supportive of that contained within PPG13, especially those which may have an impact on transport and infrastructure in London.</p> <p><b>Influence on SA</b></p> <p>The SA can draw on this PPG to identify issues relating to transport which may be influenced by CCAS policy and issues, and ensure the CCAS is supportive of national planning policy related to transport.</p> <p><b>Context topics: 2. Place, 6. Economy</b></p>
<p>ODPM (2003) <i>Planning Policy Statement 22: Renewable Energy</i>  <a href="http://www.communities.gov.uk/planningandbuilding/planningpolicyguidance/planningpolicystatements/planningpolicystatements/">http://www.communities.gov.uk/planningandbuilding/planningpolicyguidance/planningpolicystatements/planningpolicystatements/</a></p>	<p><b>Relationship with CCAS</b></p> <p>Sets out the Government's policies for renewable energy, which planning authorities should have regard to when preparing LDDs and taking planning decisions. Requires RSS's to include regional targets for renewable energy generation.</p> <p>As the focus is on renewable energy this PPS is primarily addressing a mitigation issue.</p>



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<a href="#">pps22/</a>	<p>This PPS is therefore of contextual interest rather than direct relevance to the CCAS. It remains important, however, that the CCAS does not conflict with policy as set out in PPS 22.</p> <p><b>Influence on SA</b></p> <p>The SA can ensure that the CCAS is supportive of policy set out in PPS 22 related to renewable energy generation.</p> <p><b>Context topics: 5. Waste and resources</b></p>
<p>DCLG (2004) PPS 23: <i>Planning and Pollution Control and Annex 1: Pollution Control, Air and Water Quality</i></p> <p><a href="http://www.communities.gov.uk/planningandbuilding/planning/planningpolicyguidance/planningpolicystatements/planningpolicystatements/pps23/">http://www.communities.gov.uk/planningandbuilding/planning/planningpolicyguidance/planningpolicystatements/planningpolicystatements/pps23/</a></p>	<p><b>Relationship with CCAS</b></p> <p>Sets out the relationship between planning and pollution, and sets out the manner in which planning should prevent, mitigate or minimise pollution risks – to water, land and air.</p> <p>Annex 1 includes more detailed guidance on pollution control legislation, controlling development related water pollution and the relationship between planning, development and water quality.</p> <ul style="list-style-type: none"> <li>The CCAS should include reference to this PPS where appropriate, and can draw on the policy and guidance included especially in policy / priorities related to planning, development and its relationship with pollution.</li> </ul> <p><b>Influence on SA</b></p> <p>The PPS will be a good source of information on issues and impacts relating to development and pollution, and thus will support appraisal. The SA can also advise on whether the CCAS is broadly in line with policy as set out in the PPS.</p> <p><b>Context topics: 1. People and health, 4. Water management, 5. Waste and resources:</b></p>
<p>DCLG (2006) <i>Planning Policy Statement 25: Development and Flood Risk</i> and CLG (2008) <i>Development and Flood Risk: A Practice Guide Companion to PPS25</i></p> <p><a href="http://www.communities.gov.uk/index.asp?id=1504639">http://www.communities.gov.uk/index.asp?id=1504639</a></p>	<p><b>Relationship with Water Strategy</b></p> <p>All PPSs and PPGs will have been taken into account by the Mayor in the London Plan, however as the highest level spatial planning guidance relating to flooding the PPS25 should also be an important source for drafting of the CCAS.</p> <p>Aims to ensure flood risk is taken into account at all stages in the planning process, and to avoid inappropriate development in areas of flood risk / deflect development away from the highest risk areas. It adopts a risk management base approach.</p> <ul style="list-style-type: none"> <li>The CCAS should refer to and reflect the guidance and policy set down in PPS25, particularly in policy sections which relate to flood risk and the location of development. These may be important considerations in the development of adaptation policy options for the CCAS.</li> </ul> <p>The companion guide describes how to implement PPS25, to incorporate policies that facilitate sustainable development, in particular, taking account of flood risk.</p> <p><b>Influence on SA</b></p> <p>The SA, through reference to PPS25 can advise whether the CCAS is in line with government policy. In addition the PPS is an important source of information on issues and impacts and will be used as a source document during appraisal.</p> <p><b>Context topics: 3. Climate change, 4. Water management</b></p>
<p>DCLG (2006) <i>Code for sustainable homes</i>, DCLG (2008) <i>Code for sustainable homes – Technical Guide</i></p> <p><a href="http://www.communities.gov.uk/planningandbuilding/buildingregulations/legislation/codesustainable/">http://www.communities.gov.uk/planningandbuilding/buildingregulations/legislation/codesustainable/</a></p>	<p><b>Relationship with CCAS</b></p> <p>The Code seeks to provide a single national standard to guide industry in the design and construction of sustainable homes.</p> <p>Includes minimum standards and detailed point scoring system for aspects of sustainable home-building and design, including energy, materials, water use and run-off, pollution and health and wellbeing. A key “benefit” of these is anticipated in the Code as being “better adaptation to climate change”.</p> <p>The technical guide sets out the requirements for the Code, and the processes for achieving a Code assessment, with the aim of facilitating Code assessment.</p> <p>Detailed standards may be too specific for the CCAS to consider, however the Strategy can highlight and emphasise the need to build homes to the Code standards in London – and promotion of the Code will help support the goals of the CCAS, particularly in relation to home-building in line with climate change adaptation.</p> <p><b>Influence on SA</b></p> <p>The SA should ensure that relevant policy and priorities in the CCAS are in line with, and encourage developments which meet or exceed the Code standards in relation to adaptation issues, particularly materials, water use and run-off and health and wellbeing.</p> <p><b>Context topics: All</b></p>
<p>Defra (2002) <i>Directing the flow:</i></p>	<p><b>Relationship with CCAS</b></p>

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<p><i>Priorities for future water policy</i>  <a href="http://www.defra.gov.uk/environment/water/strategy/pdf/directing_the_flow.pdf">http://www.defra.gov.uk/environment/water/strategy/pdf/directing_the_flow.pdf</a></p>	<p>Sets out what the Government feels should be the priorities for policy on water in England. Sets out the relationships between water and sustainable development, and the need to recognise this.</p> <p>Some of the direction included in this document has already been realised (such as the WFD regulations - reviewed below).</p> <p>Section 4 (paragraphs 4.29 – 4.34) discuss the specific issue of climate change impacts and how water policy will have to respond. This will be of particular relevance to the CCAS in relation to policy and priorities for water supply and management.</p> <p><b>Influence on SA</b></p> <p>The SA may make use of the large amount of information relating to the sustainable development implications of water policy. The SA may also advise on any policy inconsistency with current Government priorities.</p> <p><b>Context topics: 4. Water management</b></p>
<p>Defra (2003) <i>The Water Environment (Water Framework Directive) (England and Wales) Regulations</i>  <a href="http://www.opsi.gov.uk/si/si2003/20033242.htm">http://www.opsi.gov.uk/si/si2003/20033242.htm</a></p>	<p><b>Relationship with CCAS</b></p> <p>Sets out the England and Wales regulatory response to the Water Framework Directive (WFD). In particular provides the framework and responsibilities for the Environment Agency and the Secretary of State in relation to river basin management in compliance with the requirements of the WFD. This includes conducting an analysis of water use, identification of water bodies used for abstraction, a register of protected areas, and proposals for monitoring water quality and status. The Agency is also required to establish River Basin Management Plans (RBMPs).</p> <p>The regulations require the Environment Agency to gather and maintain a large amount of information relating to the abstraction, use and management of water at the “river basin district” scale. Information relevant to London – the Thames River Basin District – may be of use in monitoring aspects of the CCAS.</p> <p>The Thames RBMP, due to be published in December 2009 will be an important strategic document in relation to all aspects of water management effecting London. The CCAS will need to refer to the RBMP which will be introduced within the lifetime of the CCAS.</p> <p><b>Influence on SA</b></p> <p>Regulations set out responsibilities and roles in relation to meeting the requirements of the WFD and particularly river basin management. The SA can help to advise on areas where conflict or positive interactions may exist between the CCAS and the strategic management of water required by River Basin Management Plans.</p> <p><b>Context topics: 2. Place, 4. Water management, 6. Economy</b></p>
<p>DEFRA (2006) <i>River basin planning guidance</i> and DEFRA (2008) <i>River basin planning guidance Volume II</i>  <a href="http://www.DEFRA.gov.uk/environment/water/wfd/pdf/riverbasguidance.pdf">http://www.DEFRA.gov.uk/environment/water/wfd/pdf/riverbasguidance.pdf</a>   <a href="http://www.defra.gov.uk/environment/water/wfd/pdf/riverbasguidance-Vol2.pdf">http://www.defra.gov.uk/environment/water/wfd/pdf/riverbasguidance-Vol2.pdf</a></p>	<p><b>Relationship with CCAS</b></p> <p>Both documents provide statutory guidance to the Environment Agency on the practical implementation of the WFD. Thus supports and provides detailed guidance for the Agency in meeting its’ requirements under the Water Environment (Water Framework Directive) Regulations (reviewed above).</p> <p>Limited direct relevance for the CCAS.</p> <p><b>Influence on SA</b></p> <p>The SA can help to advise on areas where conflict or positive interactions may exist between the CCAS and the strategic management of water required by River Basin Management Plans.</p> <p><b>Context topics: 2. Place, 4. Water management, 6. Economy</b></p>
<p>Environment Agency (2009) <i>Water for Life and Livelihoods – A consultation on the Draft River Basin Management Plan Thames River Basin District</i>  <a href="http://www.environment-agency.gov.uk/research/planning/33106.aspx">http://www.environment-agency.gov.uk/research/planning/33106.aspx</a></p>	<p><b>Relationship with CCAS</b></p> <p>The River Basin Management Plan for the Thames River Basin District contains detailed information related to the current quality of water bodies in the Thames catchment, and information related to likely future pressures. The plan describes what multiple actors will have to do to improve the water environment over the next 20 years.</p> <p><b>Influence on SA</b></p> <p>While providing useful information at the level of the Thames catchment, the Plan’s usefulness to the SA is limited due to the lack of London specific information. However, it may be useful background information for the types of measures that will be employed to improve water quality over the long term.</p> <p><b>Context topics: 2. Place, 4. Water management, 6. Economy</b></p>
<p>Defra (2004) <i>Making space for water.</i>  And</p>	<p><b>Relationship with CCAS</b></p> <p>Sets out a holistic approach to managing flood and coastal risks in England. Risks should be managed so as to: reduce the threat to people and their property and</p>

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<p>Defra (2005) <i>Taking forward a new Government strategy for flood and coastal erosion risk management in England. First Government response to the autumn 2004 Making space for water consultation exercise</i>  <a href="http://www.DEFRA.gov.uk/environ/fcd/policy/strategy.htm">http://www.DEFRA.gov.uk/environ/fcd/policy/strategy.htm</a>  <a href="http://www.DEFRA.gov.uk/environ/fcd/policy/strategy/1f1f2.htm">http://www.DEFRA.gov.uk/environ/fcd/policy/strategy/1f1f2.htm</a></p>	<p>deliver the greatest environmental, social and economic benefit consistent with the Government's sustainable development principles.</p> <p>The 2005 consultation document seeks to "take forward" the original strategy. Of key relevance to the CCAS are chapters: 4 – land use planning; 5 – resilience and resistance; 7 – integrated urban drainage management; and, 9 - living with flood risk.</p> <p>The Making Space for Water programme and actions should be a key source of direction in terms of policy and priority for the CCAS in relation to high-level and long term flood risk management vision, aims and actions.</p> <p><b>Influence on SA</b></p> <p>The SA will ensure that the CCAS reflects and supports the actions and priorities set out in Making Space for water.</p> <p><b>Context topics: 1. People and health, 2. Place, 3. Climate change, 4. Water management</b></p>
<p>Defra (2007) <i>Consultation on proposed changes to powers to restrict non-essential uses of water</i>  <a href="http://www.DEFRA.gov.uk/environment/water/resources/drought/pdf/consultation-2007.pdf">http://www.DEFRA.gov.uk/environment/water/resources/drought/pdf/consultation-2007.pdf</a></p>	<p><b>Relationship with CCAS</b></p> <p>Seeks views from stakeholders with an interest in the scope of hosepipe bans and drought orders. It is part of a review of the scope of the legislative framework relating to non-essential water uses.</p> <p>Depending on consultation outcomes this review may (among other related matters) lead to proposals for the expansion of the range of "discretionary" uses of water which companies may temporarily restrict or prohibit. Future legislative changes are therefore possible.</p> <p>It may be appropriate for the CCAS to make reference to this process, and the possibility of future legislation – as climate change is a factor in possible future water shortages.</p> <p><b>Influence on SA</b></p> <p>Limited. The SA recommends that the CCAS refers to this consultation in relation to future water management.</p> <p><b>Context topics: 4. Water management</b></p>
<p>Defra (2005) <i>Drought orders and drought permits</i>  <a href="http://www.DEFRA.gov.uk/environment/water/resources/drought/pdf/info2005.pdf">http://www.DEFRA.gov.uk/environment/water/resources/drought/pdf/info2005.pdf</a></p>	<p><b>Relationship with CCAS</b></p> <p>Seeks to set out "in a clear and accessible form" information about the process for obtaining drought permits and drought orders.</p> <p>Limited relevance to the CCAS, however may be useful as context information.</p> <p><b>Influence on SA</b></p> <p>Limited. The SA may draw upon this to inform baseline.</p> <p><b>Context topics: 4. Water management</b></p>
<p>DCLG (2007) <i>Water Efficiency in New Buildings: a joint DEFRA and DCLG policy statement</i>  <a href="http://www.communities.gov.uk/publications/planningandbuilding/water-efficiency">http://www.communities.gov.uk/publications/planningandbuilding/water-efficiency</a></p>	<p><b>Relationship with CCAS</b></p> <p>This policy statement follows a consultation in 2006, which sought views on proposals to make minimum standards of water efficiency performance mandatory in all new homes and new commercial developments. These standards will underpin those set out in the Code for Sustainable Homes.</p> <p>The statement summarises the consultation, and sets out the "next steps" to be taken in developing policy in the area of water efficiency.</p> <p>The statement proposes the adoption of a "minimum standard of 125 litres per person per day" for water use in new buildings. If adopted this standard would be mandatory. It is proposed to be included in amended Building Regulations in 2008.</p> <p>The statement also sets out proposals in relation to specific fixtures and fittings, to be addressed through changes to the water supply regulations.</p> <p>Specific aspects of these proposals are probably more detailed than the CCAS will be able to reflect, however the CCAS should support and refer to the proposed water efficiency standards in appropriate sections.</p> <p><b>Influence on SA</b></p> <p>The SA will advise on whether the CCAS reflects the standards and priorities set out.</p> <p><b>Context topics: 4. Water management, 5. Waste and resources</b></p>
<p>ODPM (2005) <i>Diversity and Equality in Planning, a good practice guide</i>  <a href="http://www.communities.gov.uk/publications/planningandbuilding/diversityequality">http://www.communities.gov.uk/publications/planningandbuilding/diversityequality</a></p>	<p><b>Relationship with CCAS</b></p> <p>Provides very detailed guidance on the consideration of equality and diversity issues in planning. Includes a number of case studies from around the UK and good practice lessons. The guidance is aimed at all involved in planning, particularly at the local authority level.</p> <p>While climate change and adaptation are not explicitly addressed in the guide the CCAS may wish to refer to the good practice guidance included, particularly in relation</p>

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	<p>to aspects of the Strategy which will influence or be relevant to equality and / or diversity.</p> <p><b>Influence on SA</b></p> <p>The SA can use the detailed guidance and background information included as a source for the identification of issues and potential effects in relation to equality and diversity. If it is felt that the CCAS may be in conflict with suggested good practice, the SA will suggest possible changes.</p> <p><b>Context topics: 1. People and health, 2. Place</b></p>
<p>Department of Health (2008) <i>Health effects of climate change in the UK 2008: an update of the Department of Health report 2001/2002</i></p> <p><a href="http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_080702">http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_080702</a></p>	<p><b>Relationship with CCAS</b></p> <p>The report provides an update on the findings of the original 2002 report. The 2002 report focuses on the quantitative aspects of possible impacts of climate change on health. The second report takes a different approach, making recommendations for mitigating the predicted effects of climate change on health.</p> <p>The report is structured around the following topics:</p> <ul style="list-style-type: none"> <li>• Flooding, windstorms and climate change;</li> <li>• Vector-borne diseases and climate change;</li> <li>• Vector-borne diseases and climate change;</li> <li>• Vector-borne diseases and climate change;</li> <li>• Direct effects of rising temperatures on mortality in the UK;</li> <li>• The health impact of climate change due to changes in air pollution; and</li> <li>• Climate change, ground level ultraviolet radiation (UVR) and health.</li> </ul> <p>The main recommendations can be summarised as:</p> <ul style="list-style-type: none"> <li>• The need for greater emphasis to be placed on climate change and its impacts and the need for governments to focus on this problem;</li> <li>• Measures individuals can take to mitigate the effects of climate change on their health. Keeping cool in hot weather is important. The easy-to-remember advice “keep cool, keep clean, keep covered” remains sensible;</li> <li>• The need for further research in many of the areas touched on in the report.</li> </ul> <p><b>Influence on SA</b></p> <p>The SA can use the background information and recommendations as a source for the identification of issues and potential effects in relation to health. If it is felt that the CCAS may promote actions that are deleterious to health, or do not adequately respond to the potential health effects of climate change, the SA will suggest possible changes.</p> <p><b>Context topics: 1. People and health</b></p>
<b>London</b>	
<p>UKCIP (2004) <i>Living with Climate Change in the East of England</i></p> <p><a href="http://www.ukcip.org.uk/index.php?id=183&amp;option=com_content&amp;task=view">http://www.ukcip.org.uk/index.php?id=183&amp;option=com_content&amp;task=view</a></p> <p>[note – UKCIP website requires free registration in order to download documents]</p>	<p><b>Relationship with CCAS</b></p> <p>The aim of this report is to “provide hard evidence for decision-makers on the expected regional effects of climate change and to identify policies and strategies to deal with the impacts”. The document has been tailored to “business” and “local authority” decision makers.</p> <p>While the focus is the East of England the report includes a sub-regional analysis of adaptation issues in the Thames Gateway and Fringes. This section will be of particular relevance to the CCAS, and the CCAS should draw on it for background information, as well as in developing policy and priorities.</p> <p>In addition the report includes a chapter on “planning for adaptation”. This may be an important source of information for the development of policy in the CCAS related to spatial and development planning.</p> <p><b>Influence on SA</b></p> <p>The SA can draw upon the background and context information included in the report for baseline and to inform the appraisal of policies. The adaptation issues analysis will also be useful in the development of and commentary on policy options for the CCAS.</p> <p><b>Context topics: primarily – 3. Climate change, indirectly – all</b></p>
<p>City of London Corporation &amp; Acclimatise (2007) <i>Rising to the Challenge -The City of London Corporation's Climate Adaptation Strategy</i></p> <p><a href="http://217.154.230.218/NR/rdonlyre">http://217.154.230.218/NR/rdonlyre</a></p>	<p><b>Relationship with CCAS</b></p> <p>The strategy aims “to identify the priority risks associated with climate change and proposes adaptation measures which are designed to ensure that the City's infrastructure and services cope under a changing climate”.</p> <p>The strategy identifies risks and opportunities across a number of themes: flood risk; water resources; heat and air pollution; ground conditions; and, cross cutting issues.</p>

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<a href="http://www.london.gov.uk/gla/publications/environment.jsptpt.pdf">s/7347D392-3CF3-4344-8B2D-9AF9315E8801/0/SUS_climateada pt.pdf</a>	<p>Actions are categorised as: no-regrets; low-regrets; win-win; and flexible.</p> <p>As an adopted climate change adaptation strategy, which has already been subject to stakeholder consultation, this document can be an important source for the CCAS – in terms of ideas and options for policy, as well as identifying critical issues and areas for action.</p> <p>The CCAS can draw upon the strategy to assist in the development of policy options, and the prioritisation of actions.</p> <p>The CCAS may also wish to refer to this strategy (which is the first of its kind at the local authority level) and support the development of similar strategies across London's boroughs.</p> <p><b>Influence on SA</b></p> <p>The SA will draw upon this strategy to assist in the development and appraisal of policy in the CCAS. Equally the background information contained (in chapter 3) will be a useful source of baseline information.</p> <p><b>Context topics: 3. Climate change</b></p>
<p>London Borough of Havering (2007) <i>Climate Change Strategy 2007-2010</i>  <a href="http://www.havering.gov.uk/CHttpHandler.ashx?id=10343&amp;p=0">http://www.havering.gov.uk/CHttpHandler.ashx?id=10343&amp;p=0</a></p>	<p><b>Relationship with CCAS</b></p> <p>This strategy addresses both climate change mitigation and adaptation, in the borough of Havering. It focuses on “practical ways individual services [of the council] can both reduce their impact on climate change and how they need to adapt to the inevitable level of climate change we will experience”.</p> <p>This sets out a level of strategy more specific than will be possible under the CCAS, however the CCAS may wish to refer to this strategy, and support the development of similar strategies in local authorities across London.</p> <p><b>Influence on SA</b></p> <p>The SA can draw on this strategy as an example of local adaptation strategy, and use this to assist in the appraisal of policy in the CCAS, and in the development of options.</p> <p><b>Context topics: 3. Climate change</b></p>
<p>London Climate Change Partnership (2002) <i>London's Warming, the impacts of climate change on London</i>.  <a href="http://www.london.gov.uk/gla/publications/environment.jsp">http://www.london.gov.uk/gla/publications/environment.jsp</a></p> <p>[summary report and technical report available]</p>	<p><b>Relationship with CCAS</b></p> <p>This report provides a detailed assessment of the expected climate change impacts in a London context.</p> <p>It should be the key information and baseline resource for the development of the CCAS, and provides the background issues which the policies and priorities in the CCAS should address.</p> <p><b>Influence on SA</b></p> <p>The SA can use the wealth of information on London specific climate impacts included in the Technical Report as a key source of baseline data. The SA will also seek to advise if the CCAS appears to be under-representing any key impacts identified in this study.</p> <p><b>Context topics: primarily – 3. Climate change, indirectly – all</b></p>
<p>London Climate Change Partnership (2005) <i>Climate change and London's transport systems</i>  <a href="http://www.london.gov.uk/climatechangepartnership/transport.jsp">http://www.london.gov.uk/climatechangepartnership/transport.jsp</a></p>	<p><b>Relationship with CCAS</b></p> <p>Building on the London's Warming study (reviewed above) this report assesses the impacts of expected climate change on transport in London. It is made up of four case studies, which look at: flood risk in the Thames Gateway; flood related infrastructure damage and station closure; infrastructure damage due to hot weather; and, passenger comfort on the underground.</p> <p>It also includes recommendations for action to manage the risks identified.</p> <p>As a key study into the issue of climate change impacts on transport in London, the CCAS should draw on the analysis included in this report during development of sections and policy related to transport.</p> <p><b>Influence on SA</b></p> <p>This study will provide useful baseline information on climate change impacts and transport in London. The SA will also make use of the findings of this study in the development and appraisal of options for the CCAS. <b>Context topics: 2. Place, 3. Climate change, 6. Economy</b></p>
<p>London Climate Change Partnership (2006) <i>Lessons for London</i>  <a href="http://www.london.gov.uk/lccp/publications/adapting-jul06.jsp">http://www.london.gov.uk/lccp/publications/adapting-jul06.jsp</a></p>	<p><b>Relationship with CCAS</b></p> <p>This study was commissioned by the London Climate Change Partnership with the intention of “informing the formation of climate adaptation policies for London”, and as a result is a key source document for the development of the CCAS. The report is aimed specifically at policy makers in London.</p> <p>The study reviewed 18 cities around the World to develop case studies to inform policy</p>

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	<p>development in London.</p> <p><b>Influence on SA</b></p> <p>The SA will use this report as a source of information to inform the appraisal of the CCAS, in particular in advising on the development of policy options, and in appraising the policies.</p> <p><b>Context topics: 3. Climate change</b></p>
<p>London Assembly (2005) <i>London under threat? Flooding risk in Thames Gateway</i>  <a href="http://www.london.gov.uk/assembly/reports/environment/flood_thames_sg.pdf">http://www.london.gov.uk/assembly/reports/environment/flood_thames_sg.pdf</a></p>	<p><b>Relationship with CCAS</b></p> <p>This report describes the potential impact of flooding in the Thames Gateway. It examines the issues of: flood risk and defences; developing a green grid; surface and sewerage flooding; planning policy; and, increasing flood resilience. It also makes a number of recommendations for action.</p> <p>It is important that the CCAS draws on the recommendations made in this study in developing policy and priorities related to the Thames Gateway.</p> <p><b>Influence on SA</b></p> <p>The SA will bear the recommendations made in this report in mind during appraisal.</p> <p><b>Context topics: 1. People and health, 2. Place, 3. Climate change, 4. Water management - all in context of Thames Gateway</b></p>
<p>GLA (2008) <i>The Mayor's London Plan: Spatial Development Strategy for Greater London</i>. Consolidated with Alterations since 2004.  <a href="http://www.london.gov.uk/mayor/strategies/sds/further-alt/ docs.jsp">http://www.london.gov.uk/mayor/strategies/sds/further-alt/ docs.jsp</a></p>	<p><b>Relationship with CCAS</b></p> <p>The London Plan is the Mayor's key spatial plan for London. The CCAS should be in accordance with and support all relevant policies and targets set out in the London Plan.</p> <p>Policies of direct relevance (others may also have indirect relevance):</p> <p>4A.1 – Tackling Climate Change  4A.2 – Mitigating Climate Change  4A.3 – Sustainable design and construction  4A.9 – Adaptation to climate change  4A.10 – Overheating  4A.11 – Living Roofs and Walls  4A.12 – Flooding  4A.13 – Flood risk management  4A.14 – Sustainable drainage  4A.15 – Rising groundwater  4A.16 – Water supplies and resources  4A.18 – Water and sewerage infrastructure  4A.19 – Improving air quality  4B.7 – London Resilience and emergency planning</p> <p><b>Influence on SA</b></p> <p>The SA will review the CCAS for coherence with London plan policies and any targets included. If necessary suggestions for changes to the CCAS will be made.</p> <p><b>Context topics: All</b></p>
<p>GLA (2009) <i>The London Plan: Spatial Development Strategy for Great London</i>. Consultation draft replacement plan  <a href="http://www.london.gov.uk/shaping-london/london-plan/">http://www.london.gov.uk/shaping-london/london-plan/</a></p>	<p><b>Relationship with CCAS</b></p> <p>The Mayor's consultation draft replacement London Plan represents the outcome of the Mayor's full review of the current London Plan (2008) – see entry above – and is intended to, following consultation, be formally adopted as the replacement London Plan towards the end of 2011.</p> <p>The consultation draft replacement Plan follows two previous consultation documents: Planning for a Better London (July 2008); and, A New Plan for London (April 2009).</p> <p>Public consultation on a full draft new London Plan is planned for autumn 2009, with a new London Plan intended for publication in the winter of 2011 – 12. The intention is that the replacement Plan is subject to an Examination in Public in the summer and autumn of 2010.</p> <p>The consultation draft replacement Plan proposes policies to replace / update those included in the current London Plan (2008). Policies considered to be of direct relevance (other may have indirect relevance) include:</p> <p>5.1 – Climate change mitigation  5.2 – Minimising carbon dioxide emissions  5.3 – Sustainable design and construction</p>

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	<p>5.4 – Retrofitting 5.9 – Overheating and cooling 5.10 – Urban greening 5.11 – Green roofs and development site environs 5.12 – Flood risk management 5.13 – Sustainable drainage 5.14 – Water quality and sewerage infrastructure 5.15 – Water use and supplies</p> <p>The CCAS, as a long-term strategic plan should be revised in the light of future changes to London Plan policies, as appropriate.</p> <p><b>Influence on SA</b></p> <p>The SA may draw on elements of the consultation draft replacement London Plan where it provides information relevant to climate change in London, and where policies go beyond those in the current Plan.</p> <p><b>Context topics: All</b></p>
<p>GLA (2005) <i>Adapting to Climate Change: A Checklist for Development. Guidance on Designing Developments in a Changing Climate,</i></p> <p><a href="http://www.london.gov.uk/lccp/publications/docs/adapting_to_climate_change.pdf">http://www.london.gov.uk/lccp/publications/docs/adapting_to_climate_change.pdf</a></p>	<p><b>Relationship with CCAS</b></p> <p>Aims to provide guidance to ensure climate change is “factored into” all new development.</p> <p>The Checklist includes guidance on various aspects of adaptation to climate change, including: ventilation and cooling; drainage; water; outdoor spaces; and, connectivity (infrastructure).</p> <p>The document is aimed at developers, design teams, architects, surveyors and engineers.</p> <p>The level of detail included in the checklist is greater than the CCAS will be able to include, however the CCAS may wish to make reference to the checklist in sections which relate to adaptation in new (or existing) development.</p> <p><b>Influence on SA</b></p> <p>The SA can use the checklist as background information on good practice in relation to development which accounts for adaptation to climate change.</p> <p><b>Context topics: 3. Climate change, 4. Water management, 5. Waste and resources</b></p>
<p>GLA (2007) <i>Action Today to Protect Tomorrow. The Mayor’s Climate Change Action Plan,</i></p> <p><a href="http://www.london.gov.uk/mayor/environment/climate-change/ccap/index.jsp">http://www.london.gov.uk/mayor/environment/climate-change/ccap/index.jsp</a></p>	<p><b>Relationship with CCAS</b></p> <p>Climate Change Action Plan is focussed on mitigation – and has at its core the reduction of emissions of CO<sub>2</sub> from all key sources. It also sets targets for emissions reductions – stabilising emissions at 60% below 1990 levels by 2025.</p> <p>The CCAS will need to be in accordance with policy and targets set out in the climate change Action Plan, especially where policy or priorities may have an impact on CO<sub>2</sub> emissions or energy use.</p> <p>It may also be useful to draw upon the strategic approach adopted in the Climate Change Action Plan, which aims at a very proactive approach to encouraging involvement in the achievement of strategic goals.</p> <p><b>Influence on SA</b></p> <p>The SA can use the Action Plan as a useful source of baseline data in relation to climate change in the London Context. It will also ensure there is general conformity between the plans – and that they support rather than conflict with each other.</p> <p><b>Context topics: 3. Climate change</b></p>
<p>GLA (2006) <i>Adaptation to Climate Change: Business as Usual?</i></p> <p><a href="http://www.london.gov.uk/lccp/publications/business-usual.jsp">http://www.london.gov.uk/lccp/publications/business-usual.jsp</a></p>	<p><b>Relationship with CCAS</b></p> <p>This report has as its focus the issue of how London is financially exposed to global climatic events, and “highlights the responsibilities, challenges and opportunities facing London’s financial service sectors”. It also poses “key questions” for each of London’s major financial sectors to ask them to consider how their operations are effected by climate events and impacts both now and in the future.</p> <p>The CCAS can use this report as a key source of information on the effects of climate change (globally) on the financial service sector of the City. The CCAS may also wish to refer to this report and the questions it contains in sections which relate to the economy of London.</p> <p><b>Influence on SA</b></p> <p>The SA will draw on this report for baseline information in relation to climate change and the economy of London (though the focus here is primarily on the financial sector)</p>

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	<b>Context topics: 3. Climate change, 6. Economy</b>
<p>GLA (2007) <i>Planning for Equality and Diversity in London. London Plan Supplementary Planning Guidance (SPG)</i>  <a href="http://www.london.gov.uk/mayor/strategies/sds/spg.jsp">http://www.london.gov.uk/mayor/strategies/sds/spg.jsp</a></p> <p>[Note - other SPG's on same link]</p>	<p><b>Relationship with Water Strategy</b></p> <p>Provides greater detail on equality and diversity issues in planning in London.</p> <ul style="list-style-type: none"> <li>The CCAS should refer to this SPG in relation to aspects of the Strategy which are related to or could influence diversity and equality.</li> </ul> <p><b>Influence on SA</b></p> <p>The SA will refer to the SPG to help identify issues relevant to diversity and equality in London. It may also provide a useful source of London specific baseline information.</p> <p><b>Context topic: 1. People and Health</b></p>
<p>GLA (2006) <i>Sustainable Design and Construction: London Plan SPG</i>  <a href="http://www.london.gov.uk/mayor/strategies/sds/sustainable_design.jsp">http://www.london.gov.uk/mayor/strategies/sds/sustainable_design.jsp</a></p>	<p><b>Relationship with CCAS</b></p> <p>Detailed guidance in support of London Plan policy 4B.6.</p> <p>Provides guidance and establishes Mayor's preferred standards for sustainable design and construction. These relate to all aspects of design and construction, and include a specific section (2.2.3) which advocates design and the use of natural systems to facilitate adaptation to climate change. Other aspects will be indirectly important for adaptation, such as water conservation, and flooding / drainage management.</p> <p>The CCAS should refer to or include the standards (and guidance) set out in the SPG where relevant to do so.</p> <p><b>Influence on SA</b></p> <p>The SA will use the SPG as a reference source for sustainable design standards in relation to sustainability, and may make recommendations for change where it is felt the CCAS could encourage relevant standards more strongly.</p> <p><b>Context topics: 2. Place, 3. Climate change, 4. Water management, 5. Waste and resources</b></p>
<p>GLA (2008) <i>London Plan SPG: East London Green Grid Network</i></p>	<p><b>Relationship with CCAS</b></p> <p>Supports the London Plan policies relating to the Green Grid, which seek to create a network of "interlinked, multi-functional and high quality open spaces that connect with town centres, public transport nodes, the countryside in the urban fringe, the Thames and major employment and residential areas".</p> <p>The Green Grid concept (among many others) includes flood risk management and adaptation to Climate Change more generally. The Green Grid is an important aspect of making East London more resilient to climate change. Specifically noted is the need to mitigate the urban heat island effect, and the role of urban greenery in this.</p> <ul style="list-style-type: none"> <li>The CCAS should support and cross-refer to the climate change adaptation related elements of the Green Grid SPG and concept. It can also recommend it be extended to the whole of London.</li> </ul> <p><b>Influence on SA</b></p> <p>The SA can advise on whether there are potential conflicts or missed opportunities between the CCAS and the Green Grid network.</p> <p><b>Context topics: 1. People and health, 2. Place, 3. Climate change, 4. Water management</b></p>
<p>London Sustainable Development Commission (2003) <i>A Sustainable Development Framework for London</i>.  <a href="http://www.london.gov.uk/mayor/sustainable-development/susdevcomm_framework.jsp">http://www.london.gov.uk/mayor/sustainable-development/susdevcomm_framework.jsp</a></p>	<p><b>Relationship with CCAS</b></p> <p>Sets out the sustainable development vision and objectives for London. It is intended to be used to provide the context for policy development and decision making, guide sustainability appraisals and monitor progress towards a more sustainable city.</p> <p>The CCAS should be developed in accordance with these high level sustainable development objectives.</p> <p><b>Influence on SA</b></p> <p>The SA will refer to the Sustainable Development Framework for London, and the appraisal will keep in mind these high-level objectives.</p> <p><b>Context topics: All</b></p>
<p>GLA (2004) <i>The Mayor's Transport Strategy Revision (2004) and Transport Strategy Implementation Targets</i></p>	<p><b>Relationship with CCAS</b></p> <p>Sets the policy framework for transport in London.</p> <p>While the Strategy does not explicitly consider climate change as a challenge for transport in London, the CCAS may need to refer to the transport strategy, particularly where policies and actions to adapt to climate change may conflict with or support transport goals.</p> <p><b>Influence on SA</b></p> <p>The SA may refer to the Transport Strategy as a source of information on transport in</p>



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	<p>London.</p> <p><b>Context topics: 1. People and health, 2. Place, 6. Economy</b></p>
<p>GLA (2009) <i>The Mayor's Transport Strategy Public Draft – draft published for public consultation</i>  <a href="http://mts.tfl.gov.uk/default.aspx">http://mts.tfl.gov.uk/default.aspx</a></p>	<p><b>Relationship with CCAS</b></p> <p>The Mayor's public consultation draft Transport Strategy has been developed from the Transport: Way to Go! (2008) consultation, and consultations with the London Assembly during 2008 and 2009. The public consultation draft Transport Strategy sets out detailed policies and proposals for the future of transport in London. Consultation on the draft will finish in January 2010, with the aim to publish a final strategy in spring 2010.</p> <p>The draft Strategy considers climate change as key challenge for transport in London. One of the goal's of the draft Strategy is "to reduce transport's contribution to climate change and improve resilience", by reducing CO<sub>2</sub> emissions from ground-based transport and adapting to climate change by maintaining the reliability of transport networks.</p> <p>The CCAS may need to refer to the transport strategy, particularly where policies and priorities for climate change adaptation may conflict with or support transport goals.</p> <p><b>Influence on SA</b></p> <p>The SA may refer to the Transport Strategy as a source of information on transport in London.</p> <p><b>Context topics: 1. People and health, 2. Place, 6. Economy</b></p>
<p>GLA (2005) <i>Sustaining Success – the Mayor's Economic Development Strategy</i></p>	<p><b>Relationship with CCAS</b></p> <p>The Strategy aims to be a plan of action for all those involved in London's economy. Its underlying principle is "that progress in improving social equity and inclusiveness for all Londoners, in tackling problems of social exclusion, improving the environment and making the city a good place in which to live, work, play, study and visit are vital to the city's continued economic success". Recognises the need to give "adequate consideration" of the climate change threat.</p> <p>The CCAS can help support the Economic Development Strategy, by stressing the economic importance of climate change adaptation, as both a threat and an opportunity.</p> <p><b>Influence on SA</b></p> <p>The SA can advise where there may be potential conflicts between economic and water related objectives, and seek to realise mutual benefits where possible.</p> <p><b>Context topics: 6. Economy</b></p>
<p>GLA (2009) <i>Rising to the Challenge – the Mayor's Economic Development Strategy for Greater London. Public Consultation Draft.</i></p> <p><a href="http://lda-consult.limehouse.co.uk/portal/eds/eds">http://lda-consult.limehouse.co.uk/portal/eds/eds</a></p>	<p><b>Relationship with CCAS</b></p> <p>The public consultation draft Economic Development Strategy (EDS) aims to set out the Mayor's ambitions for the economic development of the capital, to provide the GLA group and other strategic organisations with a clear vision, provide policy directions for achieving ambitions and to clarify roles and responsibilities.</p> <p>It seeks, over the years to 2031 and beyond, for London to "excel among global cities, expanding opportunities for all its people and enterprises, achieving the highest environmental standards and quality of life, and leading the world in its approach to tackling the urban challenges of the 21<sup>st</sup> century, particularly that of climate change".</p> <p>The Strategy explicitly recognises that climate change will pose significant challenges to London over the medium- and long-term. Objective 3 of the Strategy is concerned with driving London's transition to a low carbon economy, and to maximise the economic opportunities this will create. It also seeks to minimise the economic damage of climate change, recognising that this is important if London is to remain a competitive, successful city. Climate change adaptation and mitigation is considered one of the Strategy's "key themes".</p> <p>The CCAS can help support the Economic Development Strategy, by stressing the economic importance of climate change adaptation, as both a threat and an opportunity.</p> <p><b>Influence on SA</b></p> <p>The SA can advise where there may be potential conflicts between economic and adaptation objectives, and seek to realise mutual benefits where possible.</p> <p><b>Context topics: 6. Economy</b></p>
<p>GLA (2003) <i>The Mayor's Municipal Waste Management Strategy</i>  <a href="http://www.london.gov.uk/mayor/strategies/waste/index.jsp">http://www.london.gov.uk/mayor/strategies/waste/index.jsp</a></p>	<p><b>Relationship with CCAS</b></p> <p>Sets out overarching policy framework related to waste management in London until 2020. There is no explicit reference to climate change adaptation, though the role of waste management in mitigation of climate change is recognised.</p> <p>As waste is such an important strategic issue in London the CCAS should not conflict</p>

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	<p>with any policy in the Waste Strategy. It should also reflect specific waste related issues, where these may be influenced by policy and priorities included in the CCAS.</p> <p><b>Influence on SA</b></p> <p>The Waste Strategy provides a useful source of baseline information on waste in London. The SA will also seek to ensure that there is no policy conflict between the Waste Strategy and the CCAS.</p> <p><b>Context topics: 5. Waste and resources</b></p>
<p>GLA (2002) <i>Connecting with London's Nature. The Mayor's Biodiversity Action Plan (BAP)</i>  <a href="http://www.london.gov.uk/mayor/strategies/biodiversity/biodiversity_strategy.jsp">http://www.london.gov.uk/mayor/strategies/biodiversity/biodiversity_strategy.jsp</a></p>	<p><b>Relationship with CCAS</b></p> <p>Sets out the Mayor's vision for the future of biodiversity in London, identifying key issues and providing "innovative" solutions.</p> <p>"Energy and climate change" is recognised as a cross-cutting theme for biodiversity in London (Chapter 3, paragraphs 3.56 – 3.58). Here the role of biodiversity in adaptation is highlighted, such as using green roofs to improve thermal efficiency in buildings, and using planting around buildings to provide shade, reduce wind effects and reduce air-conditioning need.</p> <p>The importance of climate change to habitats and biodiversity is a double issue: climate change will require the adaptation of habitats and species in London; and, biodiversity can play a role in helping London adapt. These roles should be advocated in the CCAS. The CCAS should also recognise and support the wider proposal set out in the BAP.</p> <p><b>Influence on SA</b></p> <p>The SA may draw on the BAP as an important source of background information to the appraisal, and can advise and suggest modifications to the CCAS where it is felt there may be conflict between the two, or where a beneficial outcome might be enhanced.</p> <p><b>Context topics: 1. People and health, 2. Place</b></p>
<p>GLA (2004) <i>Southern City: the Mayor's Ambient Noise Strategy</i>  <a href="http://www.london.gov.uk/mayor/strategies/noise/index.jsp">http://www.london.gov.uk/mayor/strategies/noise/index.jsp</a></p>	<p><b>Relationship with CCAS</b></p> <p>Sets out a vision, objectives and policies to minimise the adverse impacts of noise on people in London.</p> <p>Recognises (paragraph 2.3) that climate change could increase noise exposure (e.g. more people with windows open, people spending more time out of doors), and proposes adaptation responses in the form of urban noise management.</p> <p>The CCAS should recognise the potential for climate change to effect noise exposure and could refer to and support the Noise Strategy.</p> <p><b>Influence on SA</b></p> <p>The SA can help ensure that the CCAS is in accordance with the noise strategy. Noise is considered as a specific appraisal criteria.</p> <p><b>Context topics: 1. People and health, 2. Place</b></p>
<p>GLA (2002) <i>Cleaning London's Air; The Mayor's Air Quality Strategy</i>  <a href="http://www.london.gov.uk/mayor/strategies/air_quality/air_quality_strategy.jsp">http://www.london.gov.uk/mayor/strategies/air_quality/air_quality_strategy.jsp</a></p>	<p><b>Relationship with CCAS</b></p> <p>Consultation on the Mayor's draft replacement Air Quality Strategy commenced in October 2009.</p> <p>The draft Strategy recognises the importance of weather and climate in influencing air quality in London.</p> <p>Future revisions to the CCAS should refer to and support the measures set out in the new Air Quality Strategy, once adopted.</p> <p><b>Influence on SA</b></p> <p>The Air Quality strategy provides a useful source of baseline information which will help inform the appraisal. The SA will also seek to ensure that the CCAS is supportive of measures included in the draft replacement Air Quality Strategy.</p> <p><b>Context topics: 1. People and health, 2. Place, 5. Waste and resources</b></p>
<p>GLA (2009) <i>Clearing the Air. The Mayor's draft Air Quality Strategy for consultation with the London Assembly and functional bodies.</i>  <a href="http://www.london.gov.uk/mayor/environment/air_quality/docs/AQS09.pdf">http://www.london.gov.uk/mayor/environment/air_quality/docs/AQS09.pdf</a></p>	<p><b>Relationship with CCAS</b></p> <p>Sets out (in great detail) the Mayor's vision and a set of measures to improve air quality in London. Focus is on air pollution sources: from traffic, aviation, buildings and industry and construction.</p> <p>The CCAS should refer to and support the measures set out in the Air Quality Strategy. In addition the CCAS can emphasise the win-win role that building and designing developments to adaptation standards will also meet other Mayoral goals, such as improving air quality.</p> <p><b>Influence on SA</b></p> <p>The Air Quality strategy provides a useful source of baseline information which will help inform the appraisal. The SA will also seek to ensure that the CCAS is supportive</p>

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	<p>of measures included in the Air Quality Strategy.</p> <p><b>Context topics: 1. People and health, 2. Place, 5. Waste and resources</b></p>
<p>GLA (2004) <i>Green Light to Clean Power. The Mayor's Energy Strategy</i>  <a href="http://www.london.gov.uk/mayor/environment/energy/index.jsp">http://www.london.gov.uk/mayor/environment/energy/index.jsp</a></p>	<p><b>Relationship with CCAS</b></p> <p>The Strategy sets out the Mayor's proposals for change in the way energy is supplied and used in London to 2014 and beyond. It proposes policies and an energy hierarchy: (1) use less energy; (2) use renewable energy; (3) supply energy efficiently.</p> <p>Climate change is recognised in the Strategy, mainly from the view-point of mitigation. However, it also recognises the need to adapt buildings due to the impacts of climate change – in relation to the energy use implications of climate impacts (such as for cooling).</p> <p>The CCAS should refer to and support the Energy Strategy, and consider energy implications of relevant policies and proposals. It can also highlight how development which is built to adaptation standards would be in line with the Energy Strategy hierarchy.</p> <p><b>Influence on SA</b></p> <p>The SA can draw background information and data from the Energy Strategy and use them to inform the appraisal. In addition by reviewing the CCAS, the SA can advise on any potential conflicts, or opportunities between the strategies.</p> <p><b>Context topics: 1. People and health, 3. Climate change, 5. Waste and resources, 6. Economy</b></p>
<p>GLA (2005) <i>London Housing Board London Housing Strategy 2005 - 2016</i>  <a href="http://www.gos.gov.uk/gol/People_sustain_comms/Housing/LondonHousingBoard/">http://www.gos.gov.uk/gol/People_sustain_comms/Housing/LondonHousingBoard/</a></p>	<p><b>Relationship with CCAS</b></p> <p>The London regional housing strategy is the London Housing Board's response to the requirements made of them by the Sustainable Communities Plan (2003).</p> <p>It has been developed to complement the London Plan, both in policy and in time frame. It sets out to meet London's housing targets and allocate them in such a way as to provide a balanced housing stock especially for the less well off (affordable housing).</p> <p>While Paragraph 2.16 recognises the CCAS as a (pending) relevant London Strategy, climate change mitigation is primarily referred to in the Strategy as an issue which efforts to promote energy efficiency and reduce fuel poverty can influence.</p> <p>The CCAS should refer to the Housing Strategy where relevant, and supports the strategy where possible. The benefit of building homes which are climate change resilient can also be advocated in the CCAS.</p> <p>The CCAS should also provide guidance or policy to seek to make wise choices in relation to the location and type of development in flood-risk areas.</p> <p><b>Influence on SA</b></p> <p>The SA will draw on any data and other information on issues and targets relating to housing in London. It will also advise where necessary if the CCAS can make a stronger strategic contribution adaptation issues in relation to housing in London.</p> <p><b>Context topics: 1. People and health, 2. Place, 4. Water management</b></p>
<p>GLA (2009) <i>The London Housing Strategy, consultation draft and GLA (2008) Housing in London: the evidence base for the London Housing Strategy</i>  <a href="http://www.london.gov.uk/mayor/housing/strategy/">http://www.london.gov.uk/mayor/housing/strategy/</a></p>	<p><b>Relationship with CCAS</b></p> <p>The draft Strategy sets out the Mayor's policies to provide more affordable homes, more family homes, tackling climate change, helping people on low to middle incomes in home ownership and increasing housing choice and mobility. It summarises the overall housing challenge facing London, including demographic trends, shifts to patterns of housing tenure and recent changes in the housing supply. The Strategy may increase the amount of homes in London, increasing water demand as a result.</p> <p><b>Influence on SA</b></p> <p>The strategy provides an indication of the projected increase in demand for housing in London. The SA will seek to ensure that proposals included in the CCAS reflect projected demand.</p> <p><b>Context topics: All</b></p>
<p>GLA (2009) London Housing Design Guide – Consultation draft  <a href="http://www.london.gov.uk/mayor/publications/2009/07/housing-design.jsp">http://www.london.gov.uk/mayor/publications/2009/07/housing-design.jsp</a></p>	<p><b>Relationship with CCAS</b></p> <p>The draft London Housing Guide seeks to set a new benchmark for the design and quality of London's housing. It clarifies, consolidates and sets new minimum standards in a number of key policy areas, including climate change adaptation and mitigation, and requires all homes developed with public funding to be in line with the Guide by 2011. The standards may eventually be incorporated as policy in the new London Plan, and as such would apply to private homes.</p> <p>The aim of the guide is "to encourage development which combines efficiency in land</p>

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	<p><i>use with the environmental benefits of well-designed, well-managed housing built to higher densities</i>".</p> <p>In relation to climate change mitigation and adaptation the draft guide seeks to ensure <i>"homes are suitable for warmer summers and wetter winters, as well as limiting the extent of future change, are key priorities for London. The guide aims to clarify the London approach to the implementation of the Code for Sustainable Homes in the context of the London Plan"</i>.</p> <p>The guide contains numerous policies, several of which are directly relevant to the CCAS:</p> <ul style="list-style-type: none"> <li>• All homes must achieve minimum level 4 of the Code for Sustainable Homes.</li> <li>• All homes should adhere to London Plan policy on sustainable design and construction and make the fullest contribution to the mitigation of and adaptation to climate change.</li> <li>• Development proposals must adopt the following Mayor's energy hierarchy; <ul style="list-style-type: none"> <li>○ using less energy (by incorporating sustainable design measures);</li> <li>○ supplying energy efficiently (by prioritising decentralised energy generation); and</li> <li>○ using renewable energy (incorporating the London Plan's presumption of 20% renewable energy)</li> </ul> </li> <li>• New dwellings should be designed to ensure that 105 litres of water is consumed per person per day as a maximum.</li> <li>• Where development in areas at risk of flooding is permitted in accordance with PPS25, new development should incorporate flood resilient design.</li> <li>• New development should adhere to standards for surface water run-off as set out in the Code for Sustainable Homes.</li> <li>• New development should incorporate space for SUDS, Living Walls and Roofs unless there are demonstrably practical and feasible reasons for not doing so.</li> </ul> <p><b>Influence on SA</b></p> <p>The draft Guide goes somewhat further than the London Plan (2008) as it requires all new homes to be built to Code for Sustainable Homes level 4, whereas the London Plan (2008) requires new homes to be built to Code level 3. However, other policies in the draft plan merely reiterate policies contained in the London Plan. The SA may use the draft Guide, and policies contained therein, in assessing the CCAS, especially for policies / proposals related to residential development and domestic energy / water use.</p> <p><b>Context topics: 3. Climate change, 4. Water management</b></p>
<p>London Assembly (2006) <i>The Blue Ribbon Network, The Heart of London</i>  <a href="http://www.london.gov.uk/assembly/reports/plansd/blue-ribbon.pdf">http://www.london.gov.uk/assembly/reports/plansd/blue-ribbon.pdf</a></p>	<p><b>Relationship with CCAS</b></p> <p>This report presents a review of the effectiveness of the Mayor's policies in relation to the Blue Ribbon Network. A key finding is that the network "needs better coordinated protection, enhancement and management".</p> <p>The Blue Ribbon Network can help provide shaded space, natural cooling of air, and can thus help combat the urban heat island effect. The CCAS should recognise this and may wish to refer to the findings of this report to support policy and priorities related to this.</p> <p><b>Influence on SA</b></p> <p>The SA can use this review as a useful source of baseline data and information on issues and opportunities in relation to the Blue Ribbon Network.</p> <p><b>Context topics: 2. Place, 6. Economy</b></p>
<p>GLA (2004) <i>London: Cultural Capital – realising the potential of a world-class city, the Mayor's Culture Strategy</i>  <a href="http://www.london.gov.uk/mayor/strategies/culture/index.jsp">http://www.london.gov.uk/mayor/strategies/culture/index.jsp</a></p>	<p><b>Relationship with CCAS</b></p> <p>The Culture Strategy sets out a number of policy which seek to promote four key objectives: excellence; creativity; access; and, value.</p> <p>Climate change is not explicitly addressed in the strategy. However the CCAS may wish to refer to the importance of culture in London, and that the impacts of climate change may influence both the fabric (infrastructure, parks, buildings etc.) and the activities (markets, sports etc.) which make up much of London's cultural value.</p> <p>The CCAS can refer to the Culture Strategy in support of policy and priority in this area.</p> <p><b>Influence on SA</b></p> <p>The SA can use the Culture Strategy as a source of background information on the cultural value of water in various forms and related issues.</p>

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	<b>Context topics: 1. People and health, 2. Place, 6. Economy</b>
<p>London Health Strategy (2000)  <a href="http://www.londonhealth.gov.uk/strategy.htm">http://www.londonhealth.gov.uk/strategy.htm</a>            Health in London. Review of the London Health Strategy and High Level Indicators (2004)</p>	<p><b>Relationship with CCAS</b>            The London Health strategy is the result of a coalition of organisations working in health in London, it provides a broad framework for the development of action plans to tackle health, with key priorities of: regeneration, inequalities, BME health and transport.            The CCAS should refer to the London Health Strategy when discussing health implications of climate change and related adaptation proposals.  <b>Influence on SA</b>            The SA may wish to draw on indicators and other information on issues related to health in London to help inform the appraisal.  <b>Context topics: 1. People and health</b></p>
<p>GLA (2008) <i>Equality in our Lifetimes – The Mayor’s Annual Equalities Report 2007/08</i>  <a href="http://www.london.gov.uk/mayor/equalities/docs/mayor-annual-equals-report-2008.pdf">http://www.london.gov.uk/mayor/equalities/docs/mayor-annual-equals-report-2008.pdf</a></p>	<p><b>Relationship with CCAS</b>            The Mayor’s Equalities Report reflects on the timeline of equality breakthroughs over the last century and identifies opportunities which must be taken to “build on the strength and dynamism offered by diversity, and allow everybody to develop their potential and achieve equality in our lifetime”.  <ul style="list-style-type: none"> <li>It may be an useful source of information for the CCAS when developing policy and priorities which may influence equality.</li> </ul> <b>Influence on SA</b>            The SA can draw from the background information and data included in the Mayor’s Equality Report. It will also through appraisal seek to advise where the CCAS may make a stronger contribution to equality, or where potential conflicts can be avoided.  <b>Context topics: 1. people and health</b></p>
<p>GLA (2008) <i>Living Well in London: the Mayor’s draft Health Inequalities Strategy</i>  <a href="http://www.london.gov.uk/mayor/priorities/health/health-strategy.jsp">http://www.london.gov.uk/mayor/priorities/health/health-strategy.jsp</a></p>	<p><b>Relationship with CCAS</b>            The Strategy details the Mayor’s framework to reduce health inequalities in London. It provides details of the current health inequalities in the city and information on the various indicators used to measure good or poor health. It sets out the Mayors vision to improve health in London.  <b>Influence on SA</b>            Provides the context to ensure that policies in the CCAS do not adversely affect the health of vulnerable groups in London. May be particularly relevant to policies related to water metering or the Urban Heat Island effect.  <b>Context topics: All</b></p>
<p>London Resilience (2008) <i>London Mass Evacuation Plan</i>  <a href="http://www.londonprepared.gov.uk/downloads/London_Mass_Evacuation_Plan_april08.pdf">http://www.londonprepared.gov.uk/downloads/London_Mass_Evacuation_Plan_april08.pdf</a></p>	<p><b>Relationship with CCAS</b>            The Mass Evacuation Plan aims to provide the agencies that make up the London Resilience Partnership and relevant responders in neighbouring regions, with a strategic framework and operational guidelines to support an evacuation of an area or areas of London. The plan has been developed so that London can respond to any eventuality; be it terrorist related, natural disaster, industrial accident or any other emergency that might require the evacuation of part or part(s) of the capital.            The aim of an evacuation is to ensure the movement, as safely as is reasonably practicable, of large numbers of people from places of danger in London to places of safety in London.            The objectives of the plan are;  <ul style="list-style-type: none"> <li>To enable the Gold Coordinating Group to respond effectively to an event that requires the evacuation of a part of London.</li> <li>To provide responding organisations with the necessary strategy to allow them to effectively implement their roles and responsibilities in support of an evacuation.</li> <li>To provide the process by which appropriate information is supplied to all responding agencies, the public and businesses, at the start of and throughout the evacuation process.</li> <li>To provide the process by which appropriate information will be distributed to the public and to businesses in advance of any evacuation, to enable them to understand the concept and to plan for their own response.</li> </ul>           The plan provides a general overview of actions, roles and responsibilities and provides an overview of options available.  <b>Influence on SA</b>            The Plan provides the context for the likely effects of a major flood in London and how the authorities intend to respond. While not directly related, it contains information useful in the context of policies related to flooding.  <b>Context topics: 4. Water management</b></p>

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<p>GLA (2009) <i>London's Great Outdoors – A Manifesto for Public Space. And, its delivery programmes: Better Water and Green Spaces Better Streets</i>  <a href="http://www.london.gov.uk/greatoutdoors/">http://www.london.gov.uk/greatoutdoors/</a></p>	<p><b>Relationship with CCAS</b></p> <p>Sets out the Mayor's ambition and high-level objectives in relation to outdoor and public spaces in London. The "manifesto" recognises the importance of appropriate public space in ensuring urban life does not become unpleasant "by the middle of the century" as a result of climate change.</p> <p>One of the objectives seeks: "A London with spaces fit for a world city, suited to changing lifestyles and responsive to the challenges of climate change".</p> <p>The Better Water and Green Spaces programme (which seeks to deliver the Manifesto) states that:</p> <p><i>"As a vital part of climate change adaptation and mitigation work, planting more trees will prepare London for the changes ahead. Increasing tree cover by ten per cent could reduce the surface temperature of a city by between three and four degrees centigrade.</i></p> <p><i>London is aiming to increase tree cover across London from 20 per cent today to 25 per cent by 2025 — around two million additional trees with a further five per cent increase by 2050.</i></p> <p><i>In inner London we will work with others to help increase green cover (planting more street trees, installing green roofs) by at least five per cent by 2030 and at least an additional five per cent by 2050."</i></p> <p>The CCAS should support / promote the role of public spaces in helping London to adapt to climate change, especially flood prevention and tackling overheating.</p> <p><b>Influence on SA</b></p> <p>The SA will draw on this document for recommendations / appraisal of policies relating to public spaces and the greening of London as an aspect of adaptation.</p> <p><b>Context topics: 1. People and Health, 2. Place.</b></p>
<b>Regulators and Public Bodies</b>	
<b>Thames / London</b>	
<p>Environment Agency (2009) <i>Thames Region catchment flood management plan</i>  <a href="http://www.environment-agency.gov.uk/research/library/consultations/54510.aspx">http://www.environment-agency.gov.uk/research/library/consultations/54510.aspx</a></p>	<p><b>Relationship with CCAS</b></p> <p>The catchment flood management plan identifies where "further work is needed" in relation to: tackling the challenge of climate change and flooding; making space for water and using the natural flood-plain; how planning authorities and regional assemblies can work with the Environment Agency to include flood risk management in strategies and plans.</p> <p>It identifies fluvial flooding from the rivers, surface water and sewer flooding from the drainage system, groundwater flooding and combined tidal and fluvial as sources of flood risk in London. The Plan states that climate change will have a major effect on the extent and frequency of future flooding. In London, the Environment Agency wants to achieve a better balance of attenuation and conveyance to manage flood risk.</p> <ul style="list-style-type: none"> <li>The CCAS should review the area where the Environment Agency has identified that further work is needed, as the Strategy could provide a useful vehicle for addressing some of these issues that relate to adaptation in the London area.</li> </ul> <p><b>Influence on SA</b></p> <p>The SA can use this document as a useful source of information on flooding and climate change risk issues in the Thames catchment area. Through the appraisal it can also suggest where the CCAS might make a stronger contribution to addressing the issues highlighted, if necessary.</p> <p><b>Context topics: 2. Place, 3. Climate change, 4. Water management</b></p>
<p>Environment Agency (2007) <i>Drought Plan for Thames region</i>  <a href="http://www.environment-agency.gov.uk/homeandleisure/drought/38595.aspx">http://www.environment-agency.gov.uk/homeandleisure/drought/38595.aspx</a></p>	<p><b>Relationship with CCAS</b></p> <p>The Thames regional drought plan is divided into an overarching regional plan, and three area plans (North East Area, West Area and South East Area).</p> <p>The plans provide a framework to deal with droughts and sets out a system for monitoring and reporting on drought onset and progress.</p> <p>This is a key document in relation to drought in the Thames region. The CCAS should draw upon these drought management plans as they set out drought management structure, the Regional Drought Team and the roles / actions the Team will have in drought events.</p> <p><b>Influence on SA</b></p> <p>The SA may wish to refer to the Drought Plans during appraisal to identify issues and responsibilities, and to advise where appropriate where the CCAS might be strengthened in relation to drought events.</p> <p><b>Context topics: 1. People and health, 3. Climate change, 4. Water management</b></p>

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<p>Environment Agency (2004 and annual updates) <i>The Thames Corridor catchment abstraction management strategy (CAMS)</i> And <i>The London CAMS Final Strategy (2006)</i>  <a href="http://www.environment-agency.gov.uk/research/planning/33414.aspx">http://www.environment-agency.gov.uk/research/planning/33414.aspx</a></p>	<p><b>Relationship with CCAS</b></p> <p>The CAMS set out a strategic assessment of water abstraction in each area (Thames Corridor, London etc.). They identify areas where water is, or is not, available for further abstraction. The CAMS form the basis for the granting of abstraction licenses by the Environment Agency.</p> <p>These are the key documents in relation to the management of water abstractions in the London area. Where appropriate the CCAS may wish to refer to them.</p> <p><b>Influence on SA</b></p> <p>The SA can refer to these reports as a source of background information and to identify specific areas where water abstraction is a critical issue – and thus likely to become increasingly critical with climate change impacts.</p> <p><b>Context topics: 3. Climate change, 4. Water management</b></p>
<p>Environment Agency (2001) <i>Water resources for the future: A strategy for Thames Region</i>            Summary report available online:  <a href="http://www.environment-agency.gov.uk/commondata/acrob/wr_thames.pdf">http://www.environment-agency.gov.uk/commondata/acrob/wr_thames.pdf</a></p> <p>Currently being updated; consultation document available:</p> <p><i>Re: regional strategies the consultation document states that they will not produce separate regional strategies, as local information on water resources management will be included in River Basin Management Plans, which are required by the Water Framework Directive (draft RBMPs were published in 2009 – see below).</i></p>	<p><b>Relationship with CCAS</b></p> <p>One of a suite of Water Resource Strategies produced by the Environment Agency for each of the Regions (8 strategies in all). The Thames Region stretches from the Cotswolds to the East of London. The Strategy sets out the water availability, supply and use situation in the Region as well as mapping out future demand and climate change issues.</p> <p><b>Influence on SA</b></p> <p>The SA can use this strategy as an important source of background information and data in relation to water issues in the Thames Region, to inform the appraisal.</p> <p><b>Context topics: 4. Water management</b></p>
<p>Environment Agency (2009) <i>Water for Life and Livelihoods – A consultation on the Draft River Basin Management Plan Thames River Basin District</i>  <a href="http://www.environment-agency.gov.uk/research/planning/33106.aspx">http://www.environment-agency.gov.uk/research/planning/33106.aspx</a></p>	<p><b>Relationship with CCAS</b></p> <p>The River Basin Management Plan for the Thames River Basin District contains detailed information related to the current quality of water bodies in the Thames catchment, and information related to likely future pressures. The plan describes what multiple actors will have to do to improve the water environment over the next 20 years.</p> <p>South East, Anglian River Basin Management Plans may also be relevant as London obtains some of its water from these River Basin Districts.</p> <p><b>Influence on SA</b></p> <p>While providing useful information at the level of the Thames catchment, the Plan's usefulness to the SA is limited due to the lack of London specific information. However, it may be useful background information for the types of measures that will be employed to improve water quality over the long term.</p> <p><b>Context topics: 3. Climate change, 4. Water management</b></p>
<p>Thames Estuary 2100 (1999), <i>Management Guidance for the Thames Estuary (Strategy)</i>  <a href="http://www.thamesweb.com/management_guidance.php?mq_id=2">http://www.thamesweb.com/management_guidance.php?mq_id=2</a></p>	<p><b>Relationship with CCAS</b></p> <p>Identifies key estuarine issues and opportunities, and promotes a series of "principles for action" aimed at achieving more sustainable management practice on the estuary and in terms of its resources. An Action Plan has also been developed.</p> <p>Although an older document (1999) the CCAS can use the Thames Estuary strategy as a source of information in relation to water policy and priorities for the Thames in London.</p> <p><b>Influence on SA</b></p> <p>The SA can keep the Thames Estuary work in mind during appraisal and advise if necessary where the CCAS can strengthen opportunities or avoid conflict with its principles and actions.</p>

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	<b>Context topics: 3. Climate change, 4. Water management</b>
Environment Agency (2009) <i>Thames Estuary 2100 – consultation draft</i> <a href="http://www.environment-agency.gov.uk/research/library/consultations/106100.aspx">http://www.environment-agency.gov.uk/research/library/consultations/106100.aspx</a>	<b>Relationship with CCAS</b> The Thames Estuary 2100 (TE2100) consultation draft is a strategic flood risk management plan for London and the Thames estuary through to the end of the century. One of the draft's principal considerations is how tidal flood risk was likely to change in response to future changes in climate and people and property in the floodplain. The plan sets out the recommendations and actions that are needed to manage flood risk through this century. Several of the actions proposed by the Environment Agency in this consultation draft require the GLA be involved as "implementation partners". The specific role of implementation partners is not contained in this strategic plan, however it is worth noting that the actions the GLA will be required to take part in relate to improving defences in the capital and ensuring that new development does not occur in areas prone to flood risk (either now or in the future). In addition, new development should not preclude flood adaptation measures. <b>Influence on SA</b> Although the plan is concerned with flood risk in London, its focus on tidal flooding reduces its relevance and influence on the SA. <b>Context topics: 4. Water management</b>
<b>National / other</b>	
HM Treasury (2007) <i>Stern Review on the economics of climate change</i> <a href="http://www.hm-treasury.gov.uk/sternreview_index.htm">http://www.hm-treasury.gov.uk/sternreview_index.htm</a>	<b>Relationship with CCAS</b> The Stern Review provides a technical economic analysis of global climate change, and advocates that early action to mitigate climate change will bring net economic benefits. It also assessed adaptation responses and provides an economic rationale for adaptation actions, on a global scale. Part V (chapters 18 – 20) focuses on policy responses for adaptation and the economics of adaptation. Chapter 19 is of particular relevance to the CCAS: "adaptation policies: key principles and applications in the developed world". Although the level of analysis and focus is more aggregated than that of the CCAS, the Stern review can provide a useful source of policy information, and should be referred to in relation to the economic consequences of inaction, and benefits of action in relation to adaptation in London. Chapter 19 will be a key resource in this respect. <b>Influence on SA</b> The SA can use the analysis in the Stern review to inform the baseline, and during appraisal to advise where the CCAS may be strengthened from an economic perspective. <b>Context topics: 3. Climate change, 6. Economy</b>
Defra (2007): <i>Conserving biodiversity in a changing climate: guidance on building capacity to adapt</i> <a href="http://www.ukbap.org.uk/Library/BRIG/CBCCGuidance.pdf">http://www.ukbap.org.uk/Library/BRIG/CBCCGuidance.pdf</a>	<b>Relationship with CCAS</b> The aim of this guidance is to provide a framework of how to reduce the impacts of climate change on biodiversity and how to adapt existing plans and projects in the light of climate change. Two types of action are identified as necessary to cope with the implications of climate change on biodiversity. The first is adaptation, increasing the ability of natural systems to absorb and respond to change, the second is mitigation, controlling and reducing emissions of greenhouse gases. Although not the subject of the guide, it recognises that decisions about land management have the potential to exacerbate or reduce greenhouse gas emissions. <b>Influence on SA</b> May be relevant in relation to policies in the CCAS that could affect biodiversity. <b>Context topics: 3. Climate change</b>
Association of British Insurers (2005) <i>Financial Risk of Climate Change</i> <a href="http://www.abi.org.uk/Display/File/Child/552/Financial_Risks_of_Climate_Change.pdf">http://www.abi.org.uk/Display/File/Child/552/Financial_Risks_of_Climate_Change.pdf</a>	<b>Relationship with CCAS</b> This study uses "insurance catastrophe models to examine the financial implications of climate change through its effects on extreme storms". It thus has as its focus global weather events (hurricanes, typhoons, windstorms), and a global outlook in terms of financial implications. It also emphasises the cost savings possible by taking adaptive action today. While the focus is much broader than that being addressed by the CCAS this report may contain some useful information regarding the insurance cost implications of climate change impacts (and thus the benefits of adaptation) in London. The CCAS may wish to draw on this information to support policy and priorities that may be perceived as imposing cost, or effort on stakeholders.



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	<p><b>Influence on SA</b></p> <p>The SA may wish to refer to this report during appraisal.</p> <p><b>Context topics: 3. Climate change, 6. Economy</b></p>
<p>Environment Agency (2009) <i>Water Resources Strategy for England and Wales</i>  <a href="http://www.environment-agency.gov.uk/research/library/publications/40731.aspx">http://www.environment-agency.gov.uk/research/library/publications/40731.aspx</a></p>	<p><b>Relationship with CCAS</b></p> <p>The Strategy sets out how the Environment Agency will manage water resources in the future to avoid significant negative impact on the environment and the economy. The vision of the strategy is:</p> <p><i>“A better place for people and wildlife for present and future generations”.</i></p> <p>The Strategy is framed in terms of the predicted impacts of climate change, and also the projected increase in demand due to population increase. It includes actions to reduce existing pressure on water resources and improve resource management, focusing on measures to reduce demand, improve efficiency (of the water supply network and fixtures / fittings) and allocated water resources more effectively. The strategy also includes measures to promote incentives to reduce demand for water.</p> <p><b>Influence on SA</b></p> <p>The Strategy provides the national policy context for the CCAS, and is an indication of the likely future direction that relevant policy will take. The Strategy provides contextual information on current and future pressures on water resources, how water resources can / will be managed to adapt to and mitigate climate change and how water will be valued, which includes introducing a tariff structure for water use. The SA will assess the CCAS for consistency with the Water Resources Strategy, and provide comment where there is a divergence.</p> <p><b>Context topic: 4. Water management</b></p>
<p>Environment Agency (2006) <i>The water framework directive and planning: Initial advice to planning authorities in England and Wales</i>  <a href="http://www.environment-agency.gov.uk/research/planning/33102.aspx">http://www.environment-agency.gov.uk/research/planning/33102.aspx</a></p>	<p><b>Relationship with CCAS</b></p> <p>Provides advice to planners on the WFD, highlighting key elements of the Directive and potential implications for spatial planning. This may be a useful reference source for water related issues in the CCAS, and the role of local authorities in the WFD regulations, which will be important for many issues which will be influenced by climate change.</p> <p><b>Influence on SA</b></p> <p>Limited influence, although a useful source of information on the WFD and spatial planning.</p> <p><b>Context topics: 3. Climate change, 4. Water management</b></p>
<p>Environment Agency (2005) <i>The climate is changing: Time to get ready</i>  <a href="http://www.environment-agency.gov.uk/static/documents/Leisure/ea_cc_eng.2_1057452.pdf">http://www.environment-agency.gov.uk/static/documents/Leisure/ea_cc_eng.2_1057452.pdf</a></p>	<p><b>Relationship with CCAS</b></p> <p>Provides a semi-technical overview of the key climate change background, issues, impacts, responses and future scenarios. Outlines the Environment Agency's role and the actions that others can take to tackle climate change.</p> <p>This is a high level, strategic document and the issues within it may be presented at a more aggregated level than the CCAS will seek to address. None-the-less it may provide useful source material in relation to certain climate change impacts.</p> <p><b>Influence on SA</b></p> <p>As above, may provide useful background data and information on climate change and its impacts, but may be of limited direct influence.</p> <p><b>Context topics: 3. Climate change</b></p>
<p>UKCIP (2007) <i>Identifying Adaptation Options, Guidance Note</i>  <a href="http://www.ukcip.org.uk/images/stories/Tools_pdfs/ID_Adapt_options.pdf">http://www.ukcip.org.uk/images/stories/Tools_pdfs/ID_Adapt_options.pdf</a></p>	<p><b>Relationship with CCAS</b></p> <p>This note provides guidance on the identification and selection of adaption options. It is aimed at decision and policy makers. It proposes four types of option: no-regrets; low-regrets; win-win; and flexible or adaptive management. It also provides examples of adaptation options and includes an adaptation policy checklist.</p> <p>This guide may be a useful source of information on the development of policy options for the CCAS.</p> <p><b>Influence on SA</b></p> <p>The SA can use this guidance note to assist in the development and appraisal of policy options for the CCAS.</p> <p><b>Context topics: 3. Climate change</b></p>
<p>Ipsos/MORI (2007) <i>Tipping point or turning point – climate change survey</i>:  <a href="http://www.ipsos-mori.com/polls/2007/climatechang">http://www.ipsos-mori.com/polls/2007/climatechang</a></p>	<p><b>Relationship with CCAS</b></p> <p>Limited relevance, however the results of this survey may be useful as background in the development of policy options in the CCAS.</p> <p><b>Influence on SA</b></p>

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Policies, Plans, Programmes, and Strategies	Relevance to the Climate Change Adaptation Strategy and its Sustainability Appraisal
<a href="#">e.shtml</a>	As above. <b>Context topics: 3. Climate change</b>
Beating the heat: keeping UK buildings cool in a warming climate, Hacker, JN, Belcher, SE and Connel, RK (UKCIP Briefing Report, 2005) <a href="http://www.arup.com/assets/download/download396.pdf">http://www.arup.com/assets/download/download396.pdf</a>	<b>Relationship with CCAS</b> This report focuses on the specific issue of how to manage heat in buildings in the UK, in the context of climate change impacts on weather. It may be more specific in focus than the CCAS therefore is able to reflect through policy, however the CCAS may wish to refer to this document in relation to this specific adaptation issue. <b>Influence on SA</b> The SA can draw on this report in relation to this specific issue in relation to the baseline, and in appraisal. <b>Context topics: 1. People and health, 3. Climate change.</b>
Environment Agency (2007) <i>Consultation on Identifying Areas of Water Stress</i> <a href="http://publications.environment-agency.gov.uk/pdf/GEHO0107BLUT-e-e.pdf">http://publications.environment-agency.gov.uk/pdf/GEHO0107BLUT-e-e.pdf</a>	<b>Relationship with CCAS</b> Consultation closed on this document April 2007. A later version is not yet available online. The consultation sought views on the Environment Agency's proposed method of identifying (water company) areas of England that have different levels of water stress. The aim is to focus water saving activities on areas of greatest need. This may be useful information for the CCAS which could refer to the need to concentrate adaptation efforts related to water in areas of greatest stress. <b>Influence on SA</b> Limited influence on the SA, though may be a useful source of information. <b>Context topics: 4. Water management</b>
Office of Water Services (2008) <i>Service and delivery – performance of the water companies in England and Wales 2007 – 2008 report</i> <a href="http://www.ofwat.gov.uk/regulating/reporting/rpt_los_2007-08.pdf">http://www.ofwat.gov.uk/regulating/reporting/rpt_los_2007-08.pdf</a>	<b>Relationship with CCAS</b> Presents a detailed summary and analysis (with data) of water company performance in relation to: <ul style="list-style-type: none"> <li>• The Guaranteed Standards Scheme.</li> <li>• Levels of service indicators.</li> <li>• Consumer issues.</li> <li>• Drinking water quality.</li> <li>• Security of supply.</li> </ul> The last heading, security of supply, also includes details of leakage and efficiency rates of the water companies. The analysis and data within this report could provide useful background information for the CCAS, particularly in relation to the supply, leakage and efficiency of water usage. <b>Influence on SA</b> Could provide a useful source of background data for the SA. <b>Context topics: 4. Water management</b>