



## Departmental Adaptation Plan

### Update May 2011



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May 2011  
Department for Communities and Local Government

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# Section 1

## Why climate change adaptation is important for DCLG

- 1.1. The Department for Communities and Local Government (DCLG) makes a major contribution to climate change adaptation policy in England. We work closely with other Government departments to deliver the cross-government *Adapting to Climate Change programme*<sup>1</sup> led by the Department for Environment, Food and Rural Affairs. This is because we have responsibility for:
  - **Planning and Building Regulations** in England – We are ensuring that the planning system, building regulations, the building control system and Energy Performance Certificate regimes support our ambitions for sustainable economic growth.
  - **Housing and homelessness policy** in England to meet the aspirations of a growing and ageing population and support the most vulnerable and disadvantaged in communities. This work includes building standards and investment in social housing.
  - **Supporting local government** – We are radically transforming local government, freeing it from central regulation and regional control, so that elected councils are free to deliver essential services according to local needs.
  - **Fire and rescue services** – Support them in preventing deaths and injuries from fire, promote fire prevention and respond to major national emergencies; we support resilience to and recovery from extreme weather events and emergencies.
- 1.2. Our Structural Reform Plan<sup>2</sup> priorities include decentralising power and providing greater freedom and flexibility to local government so they can genuinely lead their communities. We want to increase citizen participation and give local people far greater ability to determine the shape of places they live. Effective adaptation to a changing climate rests on local action as much as on the framework set by central Government.
- 1.3. The **core risks** we need to consider include:
  - **Coastal erosion and sea level rise** – the range of absolute sea level rise around the UK (before land movements are included) is projected to be between 12cm and 76cm for the period 1990 – 2095 for the *UK Climate Projections 2009* medium emissions scenario<sup>3</sup>. Together with storm surge and other climate impacts, this will add to the risk of coastal flooding and erosion in many locations.

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<sup>1</sup> [www.defra.gov.uk/environment/climate/adapting/](http://www.defra.gov.uk/environment/climate/adapting/)

<sup>2</sup> [www.communities.gov.uk/publications/corporate/structuralreformplan](http://www.communities.gov.uk/publications/corporate/structuralreformplan)

<sup>3</sup> <http://ukclimateprojections.defra.gov.uk/content/view/850/690/>

- **Intense rainfall and flooding** – around 5.2 million properties in England (i.e. one in six) are currently at some risk of flooding from rivers, sea or heavy rainfall. Forty-eight thousand homes flooded in the 2007 floods, two-thirds of these as a result of surface water from heavy rain. The Environment Agency estimates the summer 2007 floods cost the economy more than £3bn<sup>4</sup>.
- **Changing rainfall patterns and drought** – water availability per person is already lower in South East England than in many Mediterranean countries<sup>5</sup>. Climate change is expected to reduce summer rainfall, especially in southern England, reducing river flows and water availability for irrigation, but winter rainfall is projected to increase. Future water resource management will need to meet the needs of housing and population growth in a changing climate.
- **Higher temperatures and heat waves** – there were 35,000 premature deaths across northern Europe in the intense heatwave of 2003, including around 2,000 premature deaths in the UK<sup>6</sup>. Latest Health Protection Agency<sup>7</sup> figures estimate a one in four risk over the decade centred on 2012 of a nine days heat wave at 27°C in South East England. Without preventative action this could cause more than 3,000 immediate deaths with more than 6,350 heat related deaths in Great Britain throughout that summer. Summers as warm as 2003 could be ‘normal’ by the 2040s<sup>8</sup>.
- **Increased frequency of extreme weather events** – this will have an impact on communities and on the fire and rescue service. Increased frequency of flooding will place demands on pumping equipment and rescue. Wild fires in grassland and forests may also become more frequent in hot dry summers.
- **Pressure on local services and local funding streams** – extreme events can place severe financial pressure on local authorities – over £136m of Government funding was paid out to affected communities following the 2007 floods including funding for transport and schools repairs, for emergency management and recovery, and for affected households and businesses<sup>9</sup>. Without effective local planning and risk management, damage is likely to be more severe, local services are more likely to be disrupted, needs are less likely to be met and the knock-on impact on budgets and service delivery is likely to be more severe.
- **Risks to our estate and operations** from extreme weather and a changing climate.

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<sup>4</sup> <http://publications.environment-agency.gov.uk/pdf/SCHO1109BRJA-e-e.pdf>

<sup>5</sup> [www.environment-agency.gov.uk/static/documents/Research/waterressessummary\\_2005304.pdf](http://www.environment-agency.gov.uk/static/documents/Research/waterressessummary_2005304.pdf)

<sup>6</sup> [www.defra.gov.uk/publications/files/pb13274-uk-climate-projections-090617.pdf](http://www.defra.gov.uk/publications/files/pb13274-uk-climate-projections-090617.pdf)

<sup>7</sup> [www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH\\_080702](http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_080702)

<sup>8</sup> [www.metoffice.gov.uk/climatechange/science/explained/explained1.html](http://www.metoffice.gov.uk/climatechange/science/explained/explained1.html)

<sup>9</sup> [www.communities.gov.uk/fire/resilienceresponse/floodrecovery/](http://www.communities.gov.uk/fire/resilienceresponse/floodrecovery/)

1.4. The following section of this Departmental Adaptation Plan sets out the actions that DCLG has taken and our priorities for managing our future work on climate change adaptation. It sets these out in relation to:

- local leadership on climate adaptation and the role of localism and decentralisation
- translating policy principles into practice
- adapting buildings to climate change
- adapting to climate change in places, including to weather, fire and rescue resilience and recovery
- managing our own estate and operations and
- improving the evidence base for adaptation

## Section 2

### What we have done and encouraged others to do so far

#### Summary of key actions

##### (1) Local leadership on climate adaptation - localism and decentralisation

- **Abolished top down targets and process indicators** – delivering on our commitment to reduce bureaucracy and put responsibility in the hands of local communities where local risks are most effectively managed.
- **Championed a more localist approach to climate adaptation** – supporting the Department for Environment, Food and Rural Affairs and the Local Government Group's work to establish new arrangements for central-local Government dialogue on climate adaptation.
- **Provided continued funding to Local Government Improvement and Development**<sup>10</sup> for the delivery of improvement services to all local authorities by top-slicing Revenue Support Grant, with £32.5m for 2011-12.

##### (2) Putting principles into practice

- **The 2013 Building Regulations review** is considering how future regulatory changes take account of future climate risks<sup>11</sup>.
- **National Planning Policy Framework** – we have committed to reflecting the role played by planning in meeting the challenge of climate change. We will make it clear that planning has a big part to play – both in adapting to a changing climate and in reducing carbon emissions.

##### (3) Adapting buildings to climate change

- **Launched the 'built environment project' to shape future adaptation.** In May 2010, a new project was initiated under the cross-Government Adapting to Climate Change programme. Jointly managed by the Department for Environment, Food and Rural Affairs and DCLG, the built environment project aims to raise awareness of the implications of the changing climate and support appropriate action. The project is investigating the appropriate level of engagement with industry in order to address 'market failure' in the built environment.
- **Supporting development of the Green Deal** - such as its systems for accreditation and assessment, and helping stimulate demand, including making Energy Performance Certificates more engaging, proposals to extend Building Regulations to promote retrofit and working with housing associations to develop large scale retrofit projects.

<sup>10</sup> [www.idea.gov.uk/idk/core/page.do?pageId=1](http://www.idea.gov.uk/idk/core/page.do?pageId=1)

<sup>11</sup> [www.communities.gov.uk/publications/planningandbuilding/buildingregsnextsteps](http://www.communities.gov.uk/publications/planningandbuilding/buildingregsnextsteps)

#### **(4) Adapting to climate change in places, including to weather, fire and rescue, resilience and recovery**

- **Development and flood risk** – Coalition Agreement<sup>12</sup> commitment to preventing unnecessary building in areas of high flood risk.
- **Transparency in major infrastructure decision-making** – the Government is bringing forward national policy statements for energy, waste water, hazardous waste, ports and national networks which will embed adaptation. These will provide a clear decision-making framework for major infrastructure applications.
- **Stronger local decision-making** – under existing planning arrangements, in over 96 per cent of cases where the Environment Agency has objected to planning applications on flood risk grounds, the final decision was in line with Environment Agency advice. For residential units permitted in 2007-08, the final outcome was in line with Environment Agency advice in 99 per cent of cases.
- **Local action on a risk-based approach to coastal planning** - coastal authorities affected by erosion and flooding are increasingly applying a risk-based approach developed in dialogue with practitioners, to adapt communities to avoid social and economic blight and allow necessary development that is appropriate and safe.
- **Improving our resilience and recovery to extreme weather** - decentralised the oversight and the continuing development of the Integrated Risk Management Planning process from central Government to fire and rescue services and the fire sector.

#### **(5) Managing our own estate and operations**

- **Mapping risk better** - using the Environment Agency's flood map service and the latest UK Climate Impact Programme projections to identify risks.
- **Considered adaptation in decision-making** - the Department's *Sustainable Operations Policy*<sup>13</sup> requires all new builds, major refurbishments and office relocations to fully consider adaptation and resilience to current and future climate conditions. This will be reviewed in response to the Coalition's *Greening Government Commitments*<sup>14</sup>.
- **Formulated robust Business Continuity Plans** - which are regularly reviewed to increase our resilience and which consider flood risks and emergency planning.

<sup>12</sup> [www.cabinetoffice.gov.uk/news/coalition-documents](http://www.cabinetoffice.gov.uk/news/coalition-documents)

<sup>13</sup> [www.communities.gov.uk/publications/corporate/sustainableoperationsstatement](http://www.communities.gov.uk/publications/corporate/sustainableoperationsstatement)

<sup>14</sup> <http://sd.defra.gov.uk/gov/green-government/commitments/>

<sup>15</sup> [www.innovateuk.org/competitions/energy-efficient-whitehall.ashx](http://www.innovateuk.org/competitions/energy-efficient-whitehall.ashx)

<sup>16</sup> [www.theccc.org.uk/about-the-ccc/adaptation-sub-committee](http://www.theccc.org.uk/about-the-ccc/adaptation-sub-committee)

<sup>17</sup> [www.ukcip-arcc.org.uk/](http://www.ukcip-arcc.org.uk/)

- **Incorporated climate resilient design in retrofit projects and new builds** - such as rain water harvesting, a green roof, and heat recovery heating and ventilation systems.
- **Innovating:** as part of the Energy Efficient Whitehall programme<sup>15</sup>, DCLG's headquarter building is undertaking trials of a new window film to reduce solar heat gain, and a phase-change material thermal store to cool the building more efficiently.

#### **(6) Improving the evidence base for adaptation**

- Actively engaged with cross-Government work on the **Climate Change Risk Assessment, quality assuring material relevant to Departmental policy**.
- Contributing to the work of the **Adaptation Sub-Committee**<sup>16</sup> of the Climate Change Committee - including an assessment of costs and benefits of adaptation in the residential building sector, and work on effectiveness of local planning decisions.
- **Engaging with the wider research community** We are an active policy customer for the work of the Adaptation and Resilience to Climate Change programme<sup>17</sup>.
- **Commissioning new research** as part of cross-Government work on the built environment.

## Section 3

### Our future adaptation priorities and updates on actions

#### Local leadership on climate adaptation - localism and decentralisation

- 3.1 **Our ambition is localism** – Real change driven by local people working together in their communities. We are committed to handing back powers and responsibilities to local communities. As part of this, we have abolished top-down targets for adaptation. We have championed a more localist approach to climate adaptation – supporting the Department for Environment, Food and Rural Affairs and the Local Government Group's work to establish new arrangements for central-local Government dialogue on climate adaptation.
- 3.2 **Local circumstances, local adaptation** – Our shared vision is that most adaptation action happens, or needs to happen, at the local scale. Local government and its partners are at the forefront of action to ensure the UK is fully adapted and resilient to the impacts of climate change.
- 3.3 **Shaping the future of local communities** – Local government plays a major role in shaping local places by taking decisions and providing guidance, through the local democratic process, on the form of the urban landscape, the built environment and green or natural spaces. It also plays a key role in the management of the local natural environment and the services it provides such as local flood and coastal risk management, air quality, water resources and water quality. Key decisions being made now will affect how resilient local communities and businesses are to the future impacts of a changing climate.
- 3.4 **Resilient services** – Local authorities provide a wide range of services such as schools, adult social care, public spaces, roads and housing assistance. Changes in climate and extreme weather could impact on many of those services. Without effective local planning and risk management, climate change impacts are likely to be greater, local services are more likely to be disrupted, needs are less likely to be met and the knock-on impact on budgets and service delivery is likely to be more severe.
- 3.5 Most of the priorities for action identified by the Adaptation Sub-Committee in their July 2010 report *How well prepared is the UK for climate change?*<sup>18</sup> are already, or increasingly, led by local government and its partners - land use planning, the quality of the built environment, emergency planning and the management of natural resources. Given this it will be **essential that we include a strong local government input to the National Adaptation Programme** to be submitted to Parliament as required by the Climate Change Act 2008.
- 3.6 **We want to enable a sector-driven approach to improvement** – Which addresses long term climate change challenges and makes an effective contribution to the development of the statutory National Adaptation Programme for 2012, supporting effective local adaptation leadership and action.

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<sup>18</sup> [www.thecccc.org.uk/reports/adaptation](http://www.thecccc.org.uk/reports/adaptation)

## Update on actions

<b>Activity area</b>	<b>Progress</b>	<b>Deadline</b>	<b>Lead</b>
Local adaptation and resilience to extreme weather	<p>Top-down targets on adaptation have been ended as part of our commitment to local responsibility and decentralisation.</p> <p>New local government-led approaches to peer support and improvement will support local areas. Funding has been provided to Local Government Improvement and Development and to the Planning Advisory Service.</p> <p>The Environment Agency will work in partnership with local government to support adaptation delivery.</p>	Complete	DCLG  Local Government Group, Department for Environment, Food and Rural Affairs and Environment Agency
Dialogue with local government	Department for Environment, Food and Rural Affairs and the Local Government Group are working together on a new way of working that supports local adaptation action.	From summer 2011	Department for Environment, Food and Rural Affairs and Local Government Group

## **Bristol City Council: embedding climate change adaptation within council services**

Bristol City Council recently adopted a Climate Change and Energy Security Framework, which features adaptation to climate change as a key action. It builds on activities including assessing the weather-vulnerability and climate-sensitivity of services, and a comprehensive risk assessment of climate change threats and opportunities developed through a series of facilitated workshops which brought together over 100 council officers and experts from within the city.

The council is now focusing on embedding climate change adaptation into strategy development, risk management and key decision-making where the aim is to not only influence long-term visions but everyday council business. This diverse team effort involves practitioners from adult community care to flood risk management, food specialists to asset managers and organisations such as the Environment Agency, University of the West of England and NHS Bristol.

- A new corporate risk assessment on future-proofing the city requires the production of a Climate Change Risk Register, an Adaptation Delivery Plan and risk assessment guidance for officers.
- An Eco-Impact Assessment must be completed for all Cabinet reports and major projects with information on how the project or policy affects Bristol's resilience to climate change.
- On a citywide scale, Bristol's Development Framework Core Strategy requires developers to demonstrate through their sustainability statements how their schemes are adapted to climate change through:
  - Site layouts, and design and construction approaches which provide resilience to climate change.
  - Measures to conserve water supplies and minimise the risk and impact of flooding.
  - Using green infrastructure to minimise and mitigate the heating of the urban environment.
  - Avoiding responses to climate impacts which lead to increased energy use and carbon dioxide emissions.

Further information is available at [www.bristol.gov.uk](http://www.bristol.gov.uk) or from [sustainability@bristol.gov.uk](mailto:sustainability@bristol.gov.uk)

## **Putting principles into practice**

- 3.7 **We will continue to consider climate risk in policy development.** The challenges of adapting to climate change cannot be considered in isolation and need to be embedded into our policy making and decision making. We aim to consider early in the policy development process how we are ensuring that decisions which have long term impacts are fit for a future climate – this is about looking at opportunities to build in flexibility and early adaptation, shaping our work programmes to address key challenges, building our evidence base for decision-making, and building effective use of the climate change projections into our policy and delivery, as well as avoiding policies which have perverse impacts.
- 3.8 **We will aim to embed adaptation into policy appraisal** – incorporating the advice and tools outlined in the *Green Book supplementary guidance on adaptation*<sup>19</sup>, in a proportionate manner.

## **Update on actions**

<b>Activity area</b>	<b>Progress</b>	<b>Deadline</b>	<b>Lead</b>
Commitment to consider early in the policy development process how we are ensuring decisions which have long term impacts are fit for a future climate	Adaptation being considered as part of work shaping sustainable buildings standards and national planning policy framework.	Ongoing	Across DCLG
Commitment to embed adaptation into DCLG policy appraisal and assessment using published guidance	We are working to embed adaptation into DCLG policy appraisal through capacity building and early consideration in policy development.	Ongoing	DCLG

<sup>19</sup> <http://archive.defra.gov.uk/environment/climate/documents/adaptation-guidance.pdf>

## Adapting buildings to climate change

- 3.9 We rely on buildings to work and live in, and the adaptive capacity of the built environment to climate change will have a significant impact on communities. The floods in Sheffield and Hull in 2007 and the impact of the 2003 heatwave on urban areas such as London show how vulnerable the built environment can be. The Adaptation Sub-Committee has identified the built environment as one of its five key priority areas for early adaptation and recommended in its September 2010 report<sup>20</sup>:

*“Designing and renovating buildings – as part of any review of building regulations, the Government should consider whether amendments are required to address performance of buildings in hotter weather, alongside wider actions in the built environment to promote upgrading of the current stock;”*

*“..businesses and relevant professional bodies should take climate change into account for long-lasting decisions and in the setting of relevant standards and specifications.”*

- 3.10 We agree that **effective adaptation in the built environment is a priority**.
- 3.11 To shape our work on this priority, **we have initiated the built environment project on climate adaptation. This is a cross-Government project**, led by DCLG in partnership with the Department for Environment, Food and Rural Affairs, to develop policies to ensure that buildings are resilient to climate impacts. We are working across Government, with academic researchers and built environment professionals to examine the evidence that buildings and people will increasingly be vulnerable to risks such as overheating, and that building design and management needs to be more resilient.
- 3.12 **We are looking to develop a cohesive policy framework which will incentivise designers, developers and building owners to address adaptation risks.** This will include examining what changes may be needed in industry standards and practice and whether regulations should be ‘future climate proofed’.
- 3.13 **Working across government with industry and professionals** A number of government departments are involved (Department of Health, Department for Education, Department for Transport, Department for Business, Innovation and Skills and Department for Energy and Climate Change) along with an expert advisory group which includes the UK Climate Impacts Programme, the Chartered Institution of Building Services Engineers, the Technology Strategy Board and a wide range of other organisations.

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<sup>20</sup> [www.theccc.org.uk/reports/adaptation](http://www.theccc.org.uk/reports/adaptation)

## The built environment project

### Key workstreams:

- **Communicating the evidence** – including the Climate Change Risk Assessment, with the aim of providing the built environment sector with latest evidence and usable information on expected climate changes and risks, impacts and benefits for the built environment.
- **Providing the policy framework** – taking a joined up approach across government, understanding how different actions connect and identifying options for improvement including the review of Building Regulations, the development of criteria for measures to be eligible for the Green Deal and the development of National Planning Policy Framework.
- **Supporting innovation** – including skills for adaptation in the built environment; knowledge transfer from the Adaptation and Resilience to Climate Change research programme; and take up of new technology.
- **Supporting the delivery landscape** – building collaborative relationships with key organisations, so that industry and professional organisations have sufficient information about the projected changes in climate and are able to support the built environment sector to make adapted decisions.

### Key priorities and deliverables (falling under these four workstreams):

- **Climate Change Risk Assessment** – Ensuring that the built environment sector report is fit for purpose to inform policy-making across Government.
- **Climate data and guidance** – An opportunity to respond to industry concerns that current projections are not easily usable, and present data in usable formats such as weather files for testing building performance.
- **Overheating research** – A priority for the built environment project is to better understand the nature of overheating in buildings, the future impact of overheating on the built environment and the case for action. It will investigate what tools and levels of action are needed to assess and prevent overheating, what benefits these might bring and what role, if any, regulation might play a part alongside work with industry.
- **Mapping the delivery landscape** -Understanding key interests and influencing opportunities. Understanding the ‘built environment customer’ and the customer journey they will undergo to deliver change. A first step on this has been to assess the needs of the sector in terms of adaptation skills.
- **Innovation** – Linking to Technology Strategy Board work to support dissemination and learning, building on their successful Design for a Future Climate programme<sup>21</sup> which is putting adaptation into practice in real building and refurbishment projects and building industry capacity.
- **Identifying cost-effective adaptation** - Contributing to the Adaptation Sub-Committee’s work on developing a cost-benefit curve for adaptation.

<sup>21</sup> [www.innovateuk.org/content/competition/design-for-future-climate-adapting-buildings.ashx](http://www.innovateuk.org/content/competition/design-for-future-climate-adapting-buildings.ashx)

## Update on actions

Activity area	Progress	Deadline	Lead
Cross-Government built environment project	Scoping phase of project began in May 2010. Currently entering delivery phase.	Ongoing work	DCLG with Department for Environment, Food and Rural Affairs
Building standards and regulations	DCLG sought the views of external partners on the changes that are necessary to the regulations. The December 2010 Ministerial Statement set out the priorities for further work in 2011.	Consultation is envisaged by December 2011 with changes coming into force in 2013	DCLG
Building standards on flood risk	The Government accepts that it is sometimes appropriate for new buildings to be designed or for existing buildings to be repaired in a way that specifically addresses potential flood risk. The Government believes that a non-regulatory approach that delivers local solutions to problems is preferable. It is not therefore inclined to incorporate such standards into regulation.	No current plans for regulation in the 2013 changes. However, we will continue to work with our external partners on these issues	DCLG/ Department for Environment, Food and Rural Affairs
Voluntary and local standards	Local authorities have the ability to set standards that respond to local needs – including local climate impacts. They should consider the cumulative impacts of their policies on development when doing so, as set out in the Growth Review <sup>22</sup> .	Scoping work on streamlining local standards spring/summer 2011	DCLG
Social housing	Following a significant restructuring of the Homes and Communities Agency, details of their future structure and role on design and sustainability are being developed.	Corporate Plan and new structure due to be published summer 2011	Homes and Communities Agency

<sup>22</sup> [www.hm-treasury.gov.uk/ukecon\\_growth\\_index.htm](http://www.hm-treasury.gov.uk/ukecon_growth_index.htm)

Design	CABE's Sustainable Places <sup>23</sup> (formerly Sustainable Cities) web pages provide expert advice on planning, designing and managing a sustainable place. They include clear priorities for action alongside expert advice on effective leadership for neighbourhoods, towns or cities on a wide range of sustainability issues. CABE's work programme has now ceased and some of its activities have transferred to the Design Council <sup>24</sup> . The continued management of the Sustainable Places webpages is under discussion.	None	Design Council
Adapting existing homes	Work across Government developing the Green Deal is considering how it will be fit for a future climate, helping protect homes from overheating, and promoting water efficiency. DCLG is supporting this by: <ul style="list-style-type: none"> <li>• developing accreditation and assessment systems</li> <li>• helping stimulate demand, including making Energy Performance Certificates more engaging, proposals to extend Building Regulations to promote retrofit, and working with social landlords to develop large scale retrofit projects.</li> </ul>	The Energy Bill is expected to receive Royal Assent in the summer, with Department for Energy and Climate Change expecting to consult on secondary legislation in autumn 2011, and the first Green Deals being available from autumn 2012	Department for Energy and Climate Change, DCLG, Department for Environment, Food and Rural Affairs
Home insurance	The time-limited tenants' contents insurance initiative promoting insurance to social housing tenants ended in April 2011. Department for Environment, Food and Rural Affairs and the Treasury continue to work with the insurance industry on provision of insurance in flood risk areas.	Ongoing	Department for Environment, Food and Rural Affairs and the Treasury

<sup>23</sup> <http://webarchive.nationalarchives.gov.uk/20110118095356/http://www.cabe.org.uk/sustainable-places>

<sup>24</sup> [www.designcouncil.org.uk/](http://www.designcouncil.org.uk/)

## **Adapting to climate change in places, including to extreme weather changes**

### **ADAPTING TO CLIMATE CHANGE IN PLACES**

- 3.14 The Government is committed to giving a greater say to local communities through a **faster and more democratically accountable planning system**. We announced in December the start of work to create a **simple and consolidated National Planning Policy Framework**<sup>25</sup> covering all forms of development, as promised in the Coalition Agreement. We will be consulting on a National Planning Policy Framework later this year.
- 3.15 **Addressing climate change through planning.** We have made clear in advance of this consultation that:
- We are committed to reflecting the role played by planning in meeting the challenge of climate change. The new National Planning Policy Framework will set out our national economic, environmental and social priorities, including climate change.
  - We are committed in the Coalition Agreement to preventing unnecessary building in areas of high flood risk. The Department for Environment, Food and Rural Affairs and DCLG will work together to deliver a planning system allowing greater local decision making whilst also ensuring development is safe and sustainable.
- 3.16 Planning can ensure new development is designed and located in a way which reduces its vulnerability to the impacts of climate change: by managing development in **flood risk** areas; by balancing the risks of new development in areas vulnerable to **coastal change** with the need to sustain local communities; and by protecting or providing **green infrastructure** to reduce heat island effects.
- 3.17 The Government takes a balanced approach to **managing supply and demand for water**. Effective spatial planning, and water efficiency standards for new homes, complement wider Water Resource Management Planning, water efficiency and demand, and work on water infrastructure and water quality overseen by the Department for Environment, Food and Rural Affairs working with water companies, Ofwat and the Environment Agency.
- 3.18 Effective decision-making in shaping local places needs to address adaptation challenges, which vary considerably locally.

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<sup>25</sup> [www.communities.gov.uk/planningandbuilding/planningsystem/planningpolicy/planningpolicyframework/](http://www.communities.gov.uk/planningandbuilding/planningsystem/planningpolicy/planningpolicyframework/)

## **Stronger local planning decision-making**

The Government's priority is to see local government leading and taking responsibility for its own performance and improvement. There is already a strong track record of this.

The Planning Advisory Service (part of the Local Government Group) is working with the sector to share practical, local approaches to using the planning system to address climate change mitigation and adaptation<sup>26</sup>.

As part of its seven commitments on climate change the Royal Town Planning Institute promotes a positive and realistic response to the challenges of climate change. A climate change compendium supports this work listing key websites, guidance, research and case studies on climate change<sup>27</sup>.

Both also encourage the exchange of experience and good practice through practitioner networks and forums.

## **Coastal Groups managing coastal change**

Coastal Groups are a key presence on the coast, joining together a wealth of expertise. Covering the entire coastline of England and Wales, their unique quality of bridging local and strategic concerns has set a standard that is being followed by those managing flood risk inland.

The aim of the Coastal Groups is to give sound advice on coastal issues and influence plans to manage the risk from sea flooding and coast erosion. They are a forum for coastal practitioners to discuss problems and share best practice. Each group has used the terms of reference established by the Department for Environment, Food and Rural Affairs but tailored them to suit their needs and situation. This means each group, although similar, has a distinctive local character.

Coastal Groups embody localism to ensure that decision-making reflects local needs and preferences, whilst setting those decisions within the strategic context that is essential for sustainable management of natural systems. This enables a joined-up approach to successful, efficient and sustainable coastal management. A crucial part of this success has been the production of second round Shoreline Management Plans, which have required significant community engagement using agreed public messages that can only be achieved through the partnership approach that Coastal Groups foster.

Coastal Groups have already begun to create efficiencies in management and communication, and could potentially continue to do so into the future. In just under two years since they were established, they have demonstrated the value they bring to managing coastal erosion and flood risk. Their success is due to the collaborative partnership approach which also provides a link between local expertise and strategic thinking.

<sup>26</sup> [www.pas.gov.uk/climatechange](http://www.pas.gov.uk/climatechange)

<sup>27</sup> [www.rtpi.org.uk/item/2993](http://www.rtpi.org.uk/item/2993)

## Update on actions

<b>Activity area</b>	<b>Progress</b>	<b>Deadline</b>	<b>Lead</b>
National Planning Policy Framework	DCLG will consult on the new National Planning Policy Framework which will include a presumption in favour of sustainable development.	Consultation later in 2011	DCLG
Major infrastructure decision-making	DCLG will continue to support departments in the development of new national policy statements which provide a decision-making framework for major infrastructure and will have climate change adaptation embedded within them.	The current suite of national policy statements to be designated by December 2012	Department for Energy and Climate Change, Department for Transport and Department for Environment, Food and Rural Affairs with DCLG co-ordinating and providing advice.
Planning for coastal change	Coastal authorities are using their planning powers and latest evidence to manage the impact of coastal change so development is safe over its planned lifetime, taking account of impacts on neighbouring authorities.	Ongoing	Local planning authorities
Planning for flood risk	<p>The National Planning Policy Framework will consider how to take forward planning for flood risks.</p> <p>Coalition Agreement commitment to prevent unnecessary building in areas of high flood risk.</p> <p>Lead Local Flood Authorities will draw on local planning authorities' strategic flood risk assessments, working in partnership to develop strategies for managing local flood risk.</p>	<p>Consultation later in 2011</p> <p>Preliminary flood risk assessments underway</p>	DCLG  Local authorities
Sustainable drainage systems	There is evidence of growing use of sustainable drainage in developments approved by local planners. The Government will be publishing proposals shortly to phase in requirements for sustainable drainage as part of new development, to reduce flood risk and make it easier for	Summer 2011 consultation	Department for Environment, Food and Rural Affairs leading on new sustainable

	drainage systems to be adopted and properly maintained.		drainage systems approval framework
Planning and delivering green infrastructure	<p>In addition to the Sustainable Places web resources, CABE worked with over 100 local authorities to develop their capacity to develop and manage green infrastructure.</p> <p>Going forward, the Department for Environment, Food and Rural Affairs will work with partners developing the evidence base on the condition of England's Green Infrastructure, and on develop new ways of encouraging the design and development of more green infrastructure.</p>	Department for Environment, Food and Rural Affairs work ongoing	Department for Environment, Food and Rural Affairs /DCLG
Planning skills and capacity	Continued our commitment to supporting improvement in local planning authorities. Agreed funding of £3m in 2011-12 to the Planning Advisory Service (part of the Local Government Group). This will support local planning authorities to deliver the planning reform agenda and respond to other priorities identified by the sector.	Ongoing	DCLG and Local Government Group
Thames Gateway	Responsibility for the Gateway has been transferred from DCLG and the Homes and Communities Agency to local bodies. As a legacy of those arrangements, the recently completed Homes and Communities Agency-funded Thames Gateway brownfield land study maps all the brownfield sites in the region and broadly grades them in terms of development viability. The findings are a valuable tool for local authorities to complement planning decisions, especially in terms of flood risk and green space.	Ended	Local areas
Ecotowns	There are currently 15 local authorities and partnerships leading eco-development projects, and a number of these are working together through the Eco Development Group <sup>28</sup> . The Government's priority is to support communities in their wish adopt higher	Continuing	Local areas

<sup>28</sup> [www.tcpa.org.uk/pages/eco-development-group.html](http://www.tcpa.org.uk/pages/eco-development-group.html)

	standards of sustainability, which may be through eco-towns, and ensure that localism is a real feature of any schemes going forward. All schemes are subject to local planning decisions, led by the local authority and involving the local community. The scale of these developments (at least 5,000 homes) enables them to exploit the greater potential for innovation in climate change adaptation and mitigation technologies.		
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### Olympic legacy

The recently opened London 2012 Velodrome is a sustainability exemplar, designed and built to showcase technologies that will help us adapt to a changing climate.

The building operates a natural ventilation system which keeps athletes and spectators cool without contributing to the local heat island through waste heat from air conditioning. The Velodrome also captures rain and reuses grey-water, reducing mains water demand by up to 70 per cent.

## EXTREME WEATHER - FIRE AND RESCUE SERVICES, RESILIENCE AND RECOVERY

- 3.19 **Decentralising resilience.** In line with the Government's decentralisation agenda, the relationship between central Government and the fire and rescue service and between the service and local citizens is being re-set to ensure services are focused on the needs of communities.
- 3.20 The primary focus of central Government's relationship with the fire and rescue service is now securing national resilience, and ensuring public safety against identified national risks.
- 3.21 In line with this approach, the oversight and the continuing development of the **Integrated Risk Management Planning** process has been devolved from central Government to fire and rescue services and the fire sector.
- 3.22 Local fire and rescue services are already considering the long term risks of climate change and the emergency response to floods and wildfires. Central Government investment has put in place enhanced national flood rescue capability and high volume pumps at key locations across the country.
- 3.23 **New national Government resilience arrangements** have been developed following the closure of the Government Office Network. The work of the Regional Resilience Teams has been incorporated into DCLG responsibilities for **response** to the impacts of severe storms and weather on the built environment (with the exception of flooding, where the Department for Environment, Food and Rural

Affairs leads) and major building collapses. DCLG is also responsible for **recovery** from flooding.

## Update on actions

Activity area	Progress	Deadline	Lead
Inspection and performance assessment	Following the abolition of the Audit Commission, there is no centralised inspection process for individual Fire and Rescue Services. Performance improvement support will be undertaken by the Fire and Rescue Service sector. Government has retained its intervention powers which would only be used in exceptional cases or where the risk of failure is so serious as to require immediate and directive action.	None	Local fire authorities
Chief Fire Officers Association	The Association continues to champion best practice on adapting to climate change, and recommended the case studies below.	Ongoing	Chief Fire Officers Association

### Fire and rescue use of climate projections

Following DCLG recommendations to the fire sector to improve their awareness of climate change research, the West Midlands Fire Service worked with the Met Office to consider the impacts of climate change on its operations within its Integrated Risk Management Planning process.

They focused on two key risks - surface water flooding and secondary fires. Working with the Met Office's climate impacts and risk assessment framework, West Midlands were able to identify the impacts of climate change in their area and develop appropriate plans to cope with future climate change risks.

The study offered future risk projections - such as a projected 33 per cent increase in vegetation-related secondary fires by the 2050s, and specific adaptation advice - such as the need for flood awareness-raising campaigns in certain areas with high numbers of households with basements.

Source: West Midlands Fire Service\Met Office

## **Water efficient fire fighting**

Northamptonshire Fire and Rescue Service have taken a national lead in the use of the Cobra fire fighting system. The system uses infra red technology, in conjunction with thermal imaging, to detect fires in buildings and then, through a combined cutting, extinguishing and ventilation tool, allows fire fighters to tackle fires in a much safer and more efficient way.

As well as significantly reducing the impacts of many fires and the risks to fire fighters, the system uses significantly less water than conventional methods of fire fighting. With the availability of water predicted to reduce in the future, utilisation of new technologies like Cobra will help to ensure that Fire and Rescue Services are resilient to our changing climate.

Source: Northamptonshire Fire and Rescue Service

## **Managing our own estate and operations**

- 3.24 **We are already actively managing the impacts of current climate on our estate, as well as planning for future climate scenarios.** Having recently experienced the impacts of flooding and heat waves on DCLG properties, the Department is acutely aware of the impacts adverse weather conditions can have on day-to-day business.
- 3.25 We are currently in the process of **identifying the key risks, and adapting our buildings** - through retrofit, refurbishment and new build - and our processes through **business continuity planning** - to future climate projections.
- 3.26 The *Greening Government Commitments: Operations and Procurement*<sup>29</sup> requires departments to take steps to adapt the estate to a changing climate. In our ongoing adaptation work, we will be undertaking a more **comprehensive risk assessment of the DCLG estate**, and developing a **prioritised plan** to mitigate any significant risks.

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<sup>29</sup> <http://sd.defra.gov.uk/documents/Greening-Government-commitments.pdf>

## Update on actions

Activity area	Progress	Deadline	Lead
<b>Policy</b> – Update Sustainable Operations Policy to reflect Greening Government Commitments. Embed through DCLG Group	Currently under review.	October 2011	Property Asset Management Division
<b>Estates</b> – Undertake site risk assessments at key sites	Currently developing assessment methodology.	March 2012	Property Asset Management Division
<b>Buildings</b> – Consider adaptation requirements in all major fit out and refurbishment projects	Ongoing - adaptation features already included in various properties.	Ongoing to 2015	Property Asset Management Division

## Improving the evidence for adaptation

- 3.27 **We are continuing to build the evidence and business case for adaptation to climate change** to engage with current research and learning and aim to act early to apply evidence to policy and delivery, working with our key partners and delivery agencies.
- 3.28 **We are working to be an influential organisation that shapes the research and evidence agenda** and make effective use of emerging evidence on climate change challenges. As part of this, we are working with the Living With Environmental Change<sup>30</sup> partnership and engaging actively with research underway which has direct implications for housing and planning, and working to support effective sharing, dissemination and application of key findings.
- 3.29 **Climate Change Risk Assessment** We will work to ensure findings from the Climate Change Risk Assessment inform key areas of central and local government policy and delivery – such as building standards and planning.
- 3.30 **A built environment resilient to higher temperatures** We are investigating evidence and policy options around overheating and the built environment as a priority.

<sup>30</sup> [www.lwec.org.uk/](http://www.lwec.org.uk/)

### **Researchers meet the policy makers – heatwaves, buildings and cities**

Overheating in buildings, communities and cities is becoming an increasing problem with rising Summer temperatures. In December 2010 researchers who are investigating urban temperatures and buildings - the Adaptation and Resilience to Climate Change Coordination Network - reviewed emerging evidence with the Department for Environment, Food and Rural Affairs and DCLG policy makers<sup>31</sup>.

The seminar concluded that there is evidence to show that overheating of the built environment is a serious problem now and it will intensify in the future, impacting on both health and productivity. We are investigating to what degree policy and Government initiatives, social awareness and training of the building professionals could lead to successful adaptation of the built environment to overheating.

### **Update on actions**

<b>Activity area</b>	<b>Progress</b>	<b>Deadline</b>	<b>Lead</b>
Collaboration with Department for Environment, Food and Rural Affairs on Climate Change Risk Assessment and Adaptation Economic Analysis	Ongoing	Sectoral reports Summer 2011 and full Climate Change Risk Assessment spring 2012	Department for Environment, Food and Rural Affairs work programme with contractors HR Wallingford
Engagement with Living With Environmental Change (LWEC) partnership	We are engaging as stakeholders in several key research projects including ARCADIA (on London adaptation); SNACC (on suburban neighbourhood adaptation); CREW (on community resilience to extreme weather); and SCORCHIO and LUCID (urban climate modelling and the urban heat island effect).	LUCID and SCORCHIO now completed	ARCC research programme coordinated by UK Climate Impacts Programme
DCLG research	We intend to commission research on overheating as part of the Building Regulations review and the built environment project.	Autumn 2011	DCLG research programmes on planning and sustainable building

<sup>31</sup> [www.ukcip-arcc.org.uk/content/view/612/9/](http://www.ukcip-arcc.org.uk/content/view/612/9/)

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