

Department for Environment, Food and Rural Affairs

Climate Ready

Co-creation progress update and an invitation to respond

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Overview of ideas from co-creation activities towards a Climate Ready UK¹

Building the UK's resilience to climate change is an economic, social and environmental challenge that cuts across every sector of society.

The Climate Change Act requires the Government to publish a National Adaptation Programme following the publication of a Climate Change Risk Assessment to help build this resilience. The first Risk Assessment was published in January 2012 and Defra is planning to publish the first National Adaptation Programme in 2013.

Our vision for a Climate Ready UK is:

"A society which makes timely, far-sighted and well-informed decisions to address the risks and opportunities posed by a changing climate."

The National Adaptation Programme will be built around 5 core themes:

- Agriculture and forestry;
- Built environment and infrastructure;
- Business and services;
- Health and wellbeing;
- Natural environment.

The Climate Change Risk Assessment Summary can be found at the link below. This describes the main impacts and risks for each theme.

http://randd.defra.gov.uk/Document.aspx?Document=Summary_of_Key_Findings.pdf

There will also be a number of cross-cutting areas which thread throughout the NAP covering key risks. For example, impacts on the UK of global climate change will be very important, as will the role of local government leading adaptation action. (See Annex A for a list of these cross-cutting issues)

Your thoughts

The National Adaptation Programme will capture and build on ongoing work within a number of Government Departments which are dealing with the impacts of climate change. But equally we want to raise awareness and encourage action by businesses, local authorities and civil society and to capture all of these in the Programme document. We have already

¹ The majority of the actions that will be detailed in the National Adaptation Programme will relate to England, except those areas that have not been devolved to Wales, Scotland and Northern Ireland, known as 'Reserved and Excepted Matters'. In the United Kingdom reserved matters and excepted matters are the areas of government policy where the UK Parliament has kept the power to make laws, for example financial and economic matters, fiscal, economic and monetary policy, energy and aspects of transport policy.

started collaborative working with businesses, local authorities, civil society and other partners to 'co-create' the Programme. A wide range of stakeholders have already been involved through 15 themed workshops.

In this update, we set out the proposals we have identified for each theme. We would like to invite comments and new ideas from organisations and individuals on these proposals (see below). We also welcome the added involvement of any organisations or individuals who have not been involved so far and would like to contribute to the development of the Programme.

Please submit any comments or requests to further discuss ideas to the Climate Ready mailbox at climate.ready@defra.gsi.gov.uk by 14th September 2012.

Agriculture and forestry

Good farming and forestry practices are vital to protect our natural environment from climate pressures. Around 83% of land area is given to agriculture, forestry and woodland management. The sector is vulnerable to changes in the climate, threats to productivity from pests and erosion and the availability of key natural resources. The Agriculture sector is used to making annual changes, but has a lower capacity to adapt where co-ordinated action is needed over long periods in areas such as research and development, or in relation to large capital investments. A growing area of interest is the increased use of ecosystem service based approaches to adaptation that benefit wider society.

Theme proposals

“The agriculture and forestry sectors are resilient to climate change with foresters, farmers and land managers understanding the risks and opportunities from climate change, for their productivity and profitability, taking necessary action, and continuing to make a positive contribution to ecosystem services.”

- Agriculture – increasing resilience to drought and lack of water availability, including through water abstraction licensing reform and water catchment partnership pilots;
- Agriculture – maintain and improving soil structure and function to aid adaptation, including through soil policy and working with drainage authorities and water cycling and soil policy;
- Forestry - resilience of forestry sector to drought, pests and disease including looking at the relevant regulations grants ,research and development and working with the England Woodland Timber Partnership;
- Agriculture and forestry - continued and increasing provision of ecosystem services that aid adaptation;
- Agriculture and forestry – catalysing research, innovation and knowledge transfer necessary to adapt to risks, including looking at professional development and tools for decision making;
- Agriculture and forestry – embedding adaptation into the reform of the Common Agricultural Policy Reform and Rural Development Programme for England.

Built environment

Climate change may pose several risks to the built environment. In the short term, extreme weather such as flooding, storms, heat waves and drought may have more effect than long-term changes such as increasing temperatures and sea level rise. Most of today's new and existing buildings are not necessarily equipped to cope with current and future climates, and at the current rate of replacement, around 70% of buildings that will be in use in the 2050s, already exist.

The Built Environment theme focuses across three main areas: buildings – where, what, how and standards; resilience and response to emergencies; and decentralisation and localism.

Theme proposals

“Buildings and places and the people who live and work in them are resilient to a changing climate and extreme weather; and organisations in the built environment with an increased capacity to address the risks and take the opportunities from climate change”

- Support the implementation of planning reforms;
- Consider the response to overheating risk;
- Better and more widespread use of Green Infrastructure to mitigate climate risks; including Urban Heat Island and surface water flooding;
- Support implementation of the Water White Paper;
- Long term strategy for flood and coastal management.

Other actions include: working with sector-led initiatives, (e.g. Modern Built Environment Knowledge Transfer Network (MBE-KTN)), to promote increased uptake of practical measures; providing wider access to tools and spatial information for decision-making; developing information about costs and benefits of measures to increase resilience and identify market barriers; and piloting new approaches with the retail and construction sectors to stimulate market demand for products and services to adapt new and existing developments.

Business and services

In 2010, the turnover of the production, distribution and service industries in the UK represented approximately 94% of the whole economy. This includes an extremely diverse range of businesses, industries and services, from micro-businesses to multinational companies. They face many different risks, including natural hazards such as flooding, drought and heat waves. The level of vulnerability business sectors experience to climate risks will vary, but it's important that every sector considers the possible impacts extreme weather might have on their fixed or natural assets and supply chains. However, there are also commercial opportunities and development opportunities linked to adaptation and investment.

Theme proposals

“UK businesses are resilient to extreme weather and prepared for future risks and opportunities from climate change”

- Develop a clear business case so that businesses can see how the changing climate could affect their bottom line, and the likely return on investments;
- Communicate and engage with businesses through a variety of channels. We want businesses to be aware of the risks and opportunities, and equipped with enough information to make the right decisions for their companies, in terms of their resilience and potential for growth;
- Gain a better understanding of the insurance sector, including their exposure and ability to change behaviours regarding UK climate risks;
- Gain a better understanding of the exposure and risks to investment funds including the ability of investors to change behaviours;
- Work with the food and drink sector to address the risks the sector faces and develop appropriate policy and support services;
- Improve the assessment of resilience within the appropriate British Standards/ISO accreditations and company reporting;
- Understand the resilience of supply chains and develop good practice guidance to assess and manage risks due to supply chain disruption, including the international impacts.

Health and wellbeing (including social vulnerability and community resilience)

Climate change could have significant implications for the health and wellbeing of the UK population. There are implications for public health, the continuity of health and social care services both within the NHS and beyond, the resilience of local emergency services and the impact on the most socially vulnerable. Although there may be some extremely welcome benefits, these are projected to be outweighed overall by a range of negative effects.

Theme proposals

“A health service, public health and social care system resilient and adapted to a changing climate”

“Local resilience structures and capability take account of, and are resilient to, a changing climate”

- Develop cross-sectoral Heatwave Plan for England to help address health impacts focussing on prevention as well as response;
- Work with the local public health and social care system including the Health and Wellbeing Boards to promote resilience to community health impacts of climate change;
- Promote climate resilience of NHS services including mapping NHS estates for flood risk and developing guidance and training opportunities for NHS staff;
- Minimise risk and exposure to marine and freshwater pathogens, including developing the evidence base, raising awareness, improving early warnings and embedding action through the implementation of EU legislation;
- Climate-proof surveillance and warning systems for vector-borne diseases;
- Champion resilience to climate change impacts for the most vulnerable in society, including working in partnership with local authorities and civil society groups to strengthen capacity, capability, tools and guidance;
- Work across Government and with delivery bodies, local authorities, emergency services and Local Resilience Forums to champion community resilience in all communities;
- Build on current work to explore and if necessary strengthen capability to prevent, respond and recover to/from wildfires.

Infrastructure

Our infrastructure is an increasingly interconnected network of high-value assets with long operational lifetimes. The existing stock of bridges, roads and power stations is already vulnerable to today's extreme weather. The Government has prioritised the need to address the risks climate change presents to infrastructure and to improve the long-term resilience of new and existing infrastructure networks in the energy, ICT, transport, and water sectors. Many organisations within the infrastructure sector were asked to prepare Adaptation Reports, setting out how climate risks impact on their organisational objectives and the steps they are taking to adapt to them.

Theme proposals

“An infrastructure network that is resilient to today's natural hazards and prepared for the future changing climate”

- Embedding adaptation decision-making into key existing and new infrastructure policy areas (see bottom);
- Help implement proposals in ['Climate Resilient Infrastructure'](#) command paper;
- Develop a clear overview of the infrastructure interdependencies highlighting the potential impacts key infrastructure decisions might have on other sectors;
- Develop a strategy for a potential voluntary second round of the Adaptation Reporting Power in conjunction with key stakeholders;
- Influence and support research into future infrastructure to include climate impacts;
- Set up an industry-led forum of infrastructure operators across sectors to share knowledge and understand interdependencies on adapting to a changing climate;
- Continue work with the energy industry to assess risks related to its future use of water and in terms of sharing best practice amongst the energy networks.

Embedding adaptation decision-making into new and existing policies

- Local Highways
- Energy Networks
- Water – Sewerage Infrastructure and Supply/Demand Deficits
- Embedding adaptation into new transport policies
- Future Energy Generation
- Infrastructure Interdependencies & Cross-Sector Issues

Natural environment

The natural environment provides us with essential services, for example food, flood risk reduction, clean water and recreation, as well as having an intrinsic value. Deterioration in our natural environment as a consequence of climate change would have negative impacts on both quality of life and the economy as recent work such as the [National Ecosystem Assessment](#) demonstrated. A healthy natural environment can also help society to adapt to climate change in a sustainable way. The natural environment theme will support delivery of the [Natural Environment White Paper](#) and the [Biodiversity Strategy 2020](#).

Theme proposals

“The natural environment, with diverse and healthy ecosystems, is resilient to climate change and able to accommodate change across both rural and urban landscapes.”

- Adapting to key water risks such as environmental low flows and water quality including through piloting adaptation within the water catchment based approach and abstraction licensing reform;
- Adapting to key biodiversity risks through action to increase the resilience of landscapes and habitats including through a new ‘Climate Ready Biodiversity and Ecosystem Services Working Group’ of key stakeholders and progressing the work through Nature Improvement Areas;
- Embedding climate change adaptation within the work of the [Ecosystem Markets Task Force](#) and Defra’s Payment for Ecosystem Services project;
- Supporting [Local Nature Partnerships](#) to embed adaptation within their approach where they wish to do so;
- Adapting to key marine risks through working with the Marine Climate Change Impacts Partnership and by improving the integration between marine and land based approaches to adaptation.

Local Government

Action to increase resilience to climate change is a truly local consideration since impacts will vary according to geography and local characteristics. Under localism councils have the opportunity to play a critical role in helping communities by adapting their services (for example in the provision of social care, public health and emergency planning), the management of their estates and through their role as community leaders by increasing resilience of local spaces (for example through planning, community and businesses resilience).

While localist approaches are embedded within each of the five Climate Ready themes, given its importance local government will also feature as a cross-cutting section within the National Adaptation Programme recognising the need for a holistic package of support for local government on adaptation detailed below.

Theme proposals

To support and enable local government led adaptation action in line with decentralisation and localism agenda including:

- Develop, with input from the Local Government Association (LGA), a supportive policy framework that promotes and enables local government led adaptation action;
- Seek to raise the political profile of adaptation action with local authorities through engagement opportunities; building on the joint high level statement agreed by Defra, DCLG and the LGA;
- Support council-led initiatives such as the LGA's 'Climate Local' initiative, which supports local councils to take tailored action informed by local and other evidence including that from the Climate Change Risk Assessment to address their own unique challenges from a changing climate;
- Recognising the need for urgent action by cities, explore approaches which may be undertaken by city councils to increase resilience of urban spaces;
- Work through the Environment Agency's Climate Ready support service to ensure tools, evidence and information are fit for purpose in enabling local government to build a credible business case for action and take well-informed decisions both internally and externally with their local communities and businesses;
- Use networks such as Climate Local and the Local Adaptation Advisory Panel to ensure strong dialogue between central and local government and its partners on how best to support local adaptation action and to overcome any barriers identified;
- Work through the Local Adaptation Advisory Panel to showcase local authority work to embed adaptation into local decision making, highlighting the benefits of early action.

Annex A: Cross-cutting issues being addressed in the National Adaptation Programme

- Impacts on UK of global climate change
- Local Government
- Vulnerable groups
- Investors and insurers
- Flooding
- Water
- Overheating
- Green infrastructure
- Marine
- EU policy
- Urban
- Mitigation

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