## Natural England Standard Climate Change: why we do what we do



#### **1:0 An introduction**

#### Strategic standards for 'why we do what we do'

We have a set of standards for 'why we do what we do' for each of the main areas of our work where we help deliver environmental outcomes. These are: Access, Biodiversity, Climate Change, Ecosystem Approach, Engagement, Landscape, Land Management, Land use and Marine. They describe the relevant legislation and Government policy, our role, and the principles that we apply to our work.

The standards are for all our staff and will provide:

- a common framework to help us work more consistently
- a coherent picture of our role, Government policy and how we deliver for the natural environment, people and places
- a clearer and shared understanding of our role as a science-led, impartial delivery body
- our customers with a better understanding of what we do and why.

A number of common themes are listed below which run through the principles in the standards. As such they illustrate key attributes that will be evident across our work and our contribution to national and local priorities.

- 1. Gathering, interpreting and providing evidence and information that those making decisions and choices need.
- 2. Practical advice that helps secure a high quality and diverse natural environment, which provides services of benefit to people and the economy and is resilient to climate change.
- 3. Enabling and supporting people to act for and engage with the natural environment.
- 4. Ensuring that the natural environment contributes to green growth and quality of life.
- 5. Working with and through others.
- 6. Responsive to local circumstances and customer needs.

### 2:0 Climate Change strategic standard - definition and scope

The Earth's climate is changing as a result of an increase in carbon dioxide and other greenhouse gases in the atmosphere, caused mainly by human activities. The climate of England has already become warmer and the consequences of this have been observed on the natural environment. Scientific models indicate that warming will continue in the coming decades and there are also likely to be changes in rainfall patterns with trends towards wetter winters and drier summers. The direct and indirect impacts of climate change on

vulnerable landscapes, habitats and our wildlife, therefore need to be taken into consideration in all of Natural England's work, including an acceptance that an element of uncertainty about future change is inevitable. Practical responses to climate change are of two types; adaptation measures are intended to reduce the adverse consequence of climate change, whilst mitigation measures aim to reduce concentrations of greenhouse gases in the atmosphere.

#### **3:0 Government policy and statutory context**

The UK is playing a leading role at an international level and is working through the European Union and the UN Framework Convention on Climate Change to find ways to reach global agreement on addressing this issue. The UK has agreed a second commitment period for the Kyoto protocol and is a signatory of the 2011 Durban agreement which sets a road map to a globally binding agreement by 2015 at the latest which will succeed Kyoto.

The 2008 Climate Change Act established legally binding carbon emissions targets and is designed to accelerate the transition of the UK to a low carbon economy. The Act requires that adaptation should contribute to sustainable development and establishes a statutory basis for climate change adaptation by:

- requiring the UK government to report at least every five years on the risks of climate change to the environment, economy and society and how these will be addressed
- requiring the government to develop a national adaptation programme
- giving the government the power to direct key organisations with responsibility for critical infrastructure and services to report on the risks to their work associated with climate change and their plans for adaptation.

Climate Change is a key theme within both the Natural Environment White Paper <u>The</u> <u>Natural Choice: securing the value of nature</u> (2011) and the England Biodiversity Strategy <u>Biodiversity 2020: A strategy of wildlife and ecosystem services</u>, (2011). Biodiversity 2020 seeks an increase in the resilience of biodiversity to climate change and other pressures. It also recognises that managing our natural environment is important to wider mitigation and adaptation efforts. *Biodiversity 2020* contains a specific target to restore at least 15% of degraded ecosystems as a contribution to climate change mitigation and adaptation and requires Natural England to review the Sites of Special Scientific Interest (SSSI) Notification Strategy to take account of long term climate change. Climate change adaptation and mitigation are stated aims of the Common Agricultural Policy.

### 4:0 Natural England's role

Natural England's role in climate change is shaped by our statutory duties and our purpose under the <u>NERC Act</u> (2006) We have produced a climate change risk assessment and adaptation plan under the terms of the Climate Change Act 2008, committing us to embed climate change adaptation across all aspects of our work, including the delivery of agrienvironment schemes, protected area designations and the National Nature Reserves (NNRs) we manage. Natural England plays a leading role in advising government and others about the impacts of climate change on the natural environment and on environmental options for adaptation and mitigation. We carry out research and monitoring in support of this. A particular emphasis of our work is the synthesis and translation of evidence from research and practical experience so that it can used by others, including land managers, civil society and local communities, to develop their own approach to climate change adaptation and mitigation.

The skills and expertise of our staff from practical land management through to scientific research make it possible for us to fulfil this role. We have internationally recognised expertise in climate change adaptation and mitigation measures within the context of the natural environment.

Defra leads the development of a National Adaptation Programme. The Environment Agency has the overall lead responsibility for adaptation delivery and advice across all sectors under the 'Climate Ready' support service. We work closely with them, with an emphasis on those areas where we have expertise, particularly in the natural environment, agriculture and forestry sectors.

We contribute to climate change mitigation, through direct management, advice and agrienvironment schemes which reduce carbon emissions or promote carbon sequestration through land management.

We also show leadership as a low carbon organisation, achieving early accreditation by the Carbon Trust and reducing our 2007 carbon footprint by 50% in three years.

#### 5:0 The principles we apply to our work

#### CC1 Building resilience of the natural environment

Resilience is the capacity of a system to absorb or recover from disturbance. Our practical action, advice and delivery of agri-environment schemes will contribute to increased resilience to climate change (including extreme events) at a range of scales including populations, sites, ecological networks, landscapes and ecosystems. This will include measures that comprise good conservation practice such as protecting ecosystems; increasing the heterogeneity of the environment; allowing space for flooding and coastal processes; and developing ecological networks.

#### CC2 Recognising inevitable changes and adapting appropriately

We will use the best available data to assess climate change impacts. Where change is inevitable or beneficial we will work with our partners to accommodate and support change which protects or enhances key conservation interest features or ecosystem services within the natural environment. This will include adapting management methods to new climatic regimes and the associated change in habitat and species ecology; recognising changing species distributions.

# CC3 Adopting a sustainable, ecosystem approach to adaptation and mitigation responses

We will seek opportunities to deliver adaptation and mitigation benefits for society through the management of the natural environment. We will also work to reduce the risk of adaptation and mitigation responses by other sectors causing detrimental impacts on the natural environment. For example, changes in water usage can have adverse effects on the ecological health of our lakes and rivers. To avoid this there is need for shared understanding between the various interest groups and we will work with all our partners to build that understanding, particularly within the context of the National Adaptation Programme.

#### CC4 Adopting an adaptive management approach to adaptation and mitigation

Uncertainty about the future rate and nature of climate change and its impacts means that flexibility is needed in our response. Adaptive management is an approach which requires initial planning based on the best available evidence with regular review and revision to ensure new evidence and practical experience guide long term management through regular adjustment of plans. It also involves a preference for choices which do not close off future options. We will support the adoption of an adaptive approach by others through provision of information and advice as well as leading by example.

### CC5 Working with land managers to mitigate climate change

We will work in partnership with land managers to protect and enhance natural carbon stores, including protection of peat soils, coastal sediments, and the restoration or creation of semi-natural habitats. We will also support, through information and advice, the adoption of approaches which reduce greenhouse gas emissions and offer wider benefits for biodiversity, resource protection and other environmental objectives. We will also work with developers and others to help deliver renewable energy sustainably, by minimising adverse environmental impacts.

# CC6 Contributing to the evidence base on climate change and making it accessible to others

Successful adaptation of the natural environment requires information about the direction and impact of climate change across the environment, economy and society, and the effectiveness of various response options. We will work collaboratively with our partners to build the evidence base in our areas of responsibility, based upon research and what has been learnt from practical delivery of adaptation and mitigation measures. We will ensure our climate change evidence is accessible to others, including local communities, land managers and civil society, so that they can take appropriate adaptation and mitigation actions.

# CC7 Ensuring our staff are able to use the most up to date knowledge on climate change to give advice and take decisions

We will support our staff to develop their knowledge about the potential vulnerabilities of the natural environment and its ecosystem services to climate change. We will ensure that our staff are familiar with the range of sustainable adaptation responses and approaches to mitigation, and have the confidence to help find solutions and communicate the need for action and good practice to our partners. We will continue to encourage and nurture climate change specialists across the organisation to provide expertise tailored to the full range of our responsibilities.

Quick reference	
Type of standard	Strategic standard
Purpose:	Explains why we do what we do across our main work areas and sets out the principles that all staff are expected to apply to their work
Sign-off:	Natural England Directors and Heads of Profession
Publication:	Publication catalogue - external
Review date:	March 2014
Issue number:	Final v1.0
Updated:	May 2015 – version updated to current template