

Adapting to climate change

Limiting and adapting to climate change

Climate change is one of the biggest problems faced by humanity and is a significant long-term threat to our work.

As the leading public body for protecting and improving the environment in England and Wales we have a key role to play in managing the UK's response to climate change. Our Corporate Strategy, *Creating a Better Place*, makes limiting and adapting to climate change a strategic priority. Our work on climate change broadly covers four key areas – leadership and advocacy, adaptation, mitigation and regional and local engagement – each of which is summarised below.

Leadership and advocacy

We play a crucial role in providing policy advice to Government. For example, when the draft Climate Change Bill (Act) was published in March 2007, it had only one clause on climate change adaptation. On the back of the summer 2007 floods and our recommendations to strengthen this part of



the Bill, it now contains several important new clauses, including the formation of an Adaptation Sub-Committee to the Committee on Climate Change and a new power for Ministers to direct public authorities and statutory undertakers (such as water companies or other infrastructure providers) to address adaptation risks if they fail to do so voluntarily.

Planning policy also has a key role to play in making communities less vulnerable to climate change. We have worked closely with the Department for Communities and Local Government (CLG) to develop 'Planning Policy Statement 1 (PPS1): Supplement on Climate Change and Planning', which puts climate change at the

heart of the planning system. We are also the lead on 'PPS25: Development and Flood Risk', which ensures new developments are discouraged from areas of high flood risk and includes climate change allowances for developments.

In addition, we are working to demonstrate how the latest advances in climate science can be applied to our work. We have been working with the UK Climate Impacts Programme (UKCIP) who are developing the next generation of climate change impact scenarios (called UKCIP08). To prepare for the new scenarios, we are undertaking a major project to 'translate' them into a format that is accessible to our staff.

Climate change adaptation

We are embedding responses to climate change into our own work. Our revised Climate Change Adaptation Strategy (2008-11) builds on work started in 2005 to 'climate proof' our organisation. We are aiming to consider climate change risks in all our work, from flood risk management and water resources to agriculture and waste. Some examples of actions are given below.

Water company resource plans now include a climate change impact assessment.

Climate change allowances have been developed for Flood Risk Appraisal

guidance. Research is now underway to turn this national allowance into more specific regional and river catchment based versions.

We are undertaking an assessment of **how climate change will impact our Biodiversity Action Plan (BAP) species and habitats**, including salmon, trout and wetlands.

The next revision of the National Flood Risk Assessment (NaFRA) will include new climate change science and use the UKCIP08 scenarios.

In the coming years, we intend to significantly increase our work on adaptation. By April 2009, every part of our business will have undertaken a climate change risk assessment and by April 2010 we will have developed an Adaptation Programme that ensures our delivery is strategic, prioritising the biggest risks from climate change.

Climate change mitigation

We have a clear role in helping to reduce greenhouse gas emissions and reduce future climate change.

We are working to reduce our own 'carbon footprint', with a target to cut our emissions by 30 per cent by 2012 (from a 2005/6 baseline) from our operations, such as offices, travel, construction of flood defences and water pumping stations.

We also have a major role in helping reduce the UK's overall greenhouse gas emissions. We are responsible for regulating approximately 45 per cent of the UK's greenhouse gas emissions under the EU's Emissions Trading Scheme, and we are working with Government to establish the Carbon Reduction Commitment, a UK scheme to reduce emissions from large energy users, such as hospitals. We are also working with water companies to assess the carbon implications of delivering higher water quality standards and are advising Government on the regulation of new nuclear power stations.

However, over the next few years we will do more work on climate change mitigation.

Examples of these actions are to:

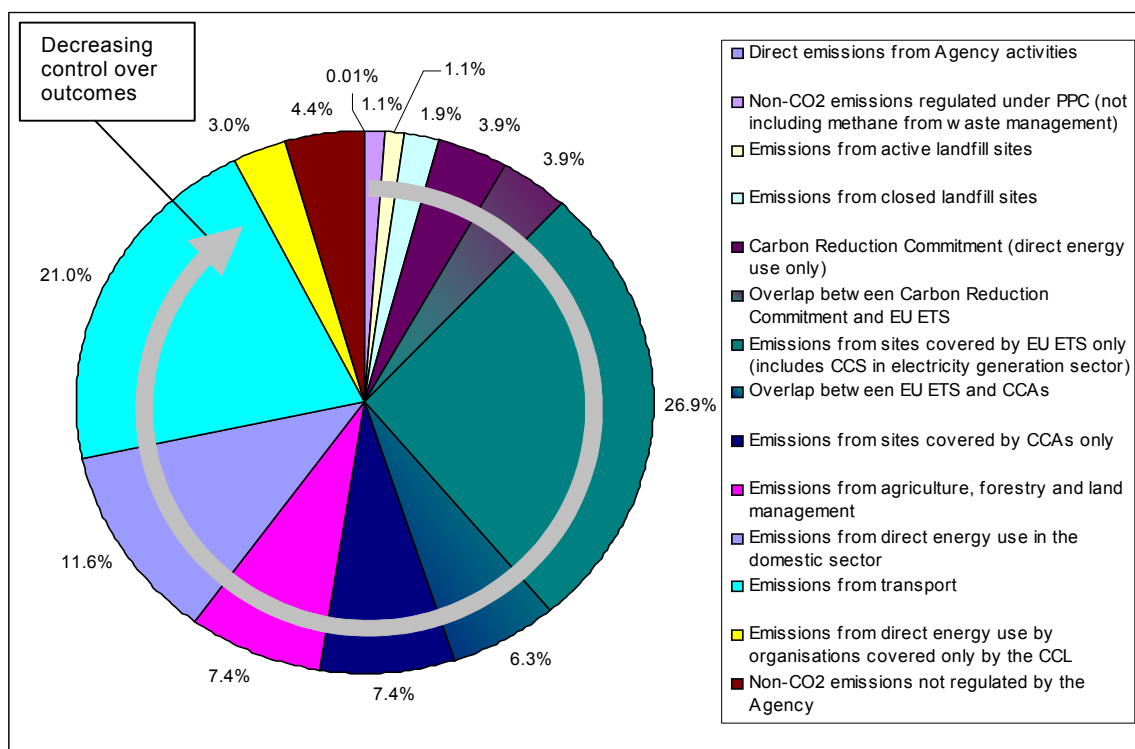
Input into Government's plans for carbon budgets and the Renewable Energy Strategy;

Research and advise on methods to achieve additional emissions reductions through flaring methane emitted from landfill sites;

Bid to operate the Climate Change Agreements and advise on emissions savings in the next phase;

Develop a series of methods to take greenhouse gas emissions into account when setting our policy;

The Environment Agency's responsibilities mapped against the UK's greenhouse gas emissions



Develop and publish opportunity maps for biomass and hydropower.

Regional and local engagement

We are actively engaged across England and Wales, working with local authorities, the Welsh Assembly Government and with partners in the English Regions, to deliver climate change adaptation and mitigation.

Our work is primarily focussed on influencing strategic policy, such as land use planning, economic development and environmental policy, as well as delivering on-the-ground projects such as flood risk management, coastal realignment projects, habitat restoration work and restoring sustainable abstractions from rivers.

Examples include:

Influencing England's Regional Spatial Strategies and Regional Economic Strategies;

Working with England's Regional Climate Change Partnerships to promote climate change adaptation to stakeholders and businesses;

Working with the Welsh Assembly Government's Climate Change Commission;

Promoting 100 per cent sign up to the Nottingham Declaration on Climate Change and the Welsh Declaration on Climate Change to Local Authorities;

Promoting the 'Adapting to Climate Change' National Indicator (NI188) to upper tier local authorities so that they include it in their Local Area Agreements (LAA), which will then act as the basis for a 3 year 'improvement programme'. Approximately a third (48) have now included it, and

Working in partnership to deliver regional research projects, such as the Adaptation on the Wear project, ESPACE and BRANCH projects.

Over the coming years we will work with the Welsh Assembly Government's Climate Change Commission and the English Regional Development Agencies to deliver Single Regional Strategies and with Local Authorities to deliver NI188.

The Environment Agency is one of the leading public bodies on climate change adaptation with a key role to play in reducing vulnerability and risks from future climate change (such as increased flooding, drought, and sea level rise). Our Climate Change Adaptation Strategy (2008-11) sets out our approach for embedding climate change adaptation into the Environment Agency's core activities.

For more information please contact the Climate Change and Risk Team on 08708 506 506 or enquiries@environment-agency.gov.uk