

THE CHALLENGE

By the 2050s* we expect annual average temperatures will have risen by between 1.8°C and 1.9°C. Summer rainfall will have reduced by between 22 - 26%, but winter rainfall will have increased by 12-17%. The growing season may lengthen further. The prospect of warmer weather, more time to grow things and less rain may sound appealing, but it hides big threats.

These temperature changes will bring a rise of 0.35 metres in the mean level of the North Sea, with storm surges being significantly higher. This might not seem much. However, virtually all of Hull and much of the Humber sub region is already below high tide level. So, it's easy to see that any rise in sea

level brings a higher risk of serious flooding.

Yorkshire and Humber will experience more extreme weather events. The flooding, heat waves, storm damage and drought that will result will have most impact in urban areas where population densities are greatest. Pressure on water supply will also grow. Some species and habitats in the region will suffer serious threats, although some others may benefit. Air quality is also likely to suffer. Public health services will face some big new challenges. Agriculture too will have to deal with new pressures and threats. Coastal areas will experience increased land erosion, loss of intertidal habitats and more tidal flooding.

TAKING DELIVERY FORWARD

The completion of the Yorkshire & Humber Climate Change Plan and the Regional Adaptation Study mark a major milestone in the drive to better understand the challenges and to accelerate action on tackling climate change in the region. The publication of these two complementary pieces of work signals a shift in emphasis from strategy to delivery.

It will be the responsibility of the Climate Change Partnership to take forward delivery of the Climate Change Plan including integrating the key adaptation work arising from the Regional Adaptation Study. The Partnership will put in place robust monitoring arrangements to ensure progress. They will constantly review their work programme and priorities to ensure the best use of available resources.

Emerging governance structures in the region will be sensitive to the critical task of ensuring the causes and effects of climate change are tackled with urgency.

Contact us

The Climate Change Plan for Yorkshire & Humber is available on-line at www.yourclimate.org.uk where background documents, partner contacts, progress reports and news items are regularly published.

For more information about the Climate Change Plan and the work of the Climate Change Partnership please contact:

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Government Office for Yorkshire and the Humber
Local Government Yorkshire and Humber
UK Climate Impacts Programme
Yorkshire Forward
Yorkshire Futures
Yorkshire & Humber Assembly
Yorkshire & Humber Regional Flood Defence Committee
Yorkshire Water

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The Yorkshire & Humber Climate Change Partnership

Climate Change Plan for Yorkshire and Humber

*Your Climate,
Our Future*

2009 - 2014

www.yourclimate.org



A REALISTIC VISION FOR 2020

Yorkshire and Humber is seriously exposed to climate change. For example, as a region we have more properties and businesses at serious flood risk than any other, apart from London. The Humber estuary is vulnerable to rising sea levels. Our industrial base of power stations, oil refineries and chemical plants also means that we have one of the most carbon intensive economies in Europe. Their competitiveness will be under threat as demands for lower emissions increase.

The task of transforming our economy and investment priorities to take account of these factors is urgent. Failure to move quickly will not only add to the risk of potentially damaging climatic events. It would also make our economy less able to compete in the new world of tough emissions targets and growing customer demand for green practices. By contrast if we adopt the right policies and promote change now, we can also make the most of the opportunities that climate change may bring. This is a huge challenge, but it can be done.

To illustrate what this might mean in practice, a realistic view of the region in ten years time would include:

- Climate Change mitigation and adaptation underpins future regional strategies and has strong local and regional leadership.

- The economy is more diverse and resource efficient with low carbon products and services in all sectors.
- Businesses use carbon trading effectively to stimulate investment in emissions reduction.
- The link between economic growth and waste growth is broken.
- Car use is reducing year on year.
- All new development is zero carbon.
- We are better prepared for extreme weather events.
- Agriculture and forestry benefit from longer growing seasons whilst managing soil quality, new pests and diseases, and extreme weather.
- We are able to help the natural environment stay healthy and adapt to climate change.

THE PLAN

The plan does not list lots of detailed actions. It is not specifically linked to CO₂ targets and cannot provide a breakdown of how they will be achieved. There are already a number of national, regional and local initiatives to deliver these targets. The plan sets out a way forward, which will become even clearer in the future single Integrated Regional Strategy. The Plan identifies gaps and sets out added value where partnership working will bring greater impacts rather than listing the mitigation and adaptive actions that every organisation needs to be putting in place.

The plan's purpose is aimed at regional and local leaders, and for decision makers in all sectors, and provides principles that will help the region adapt to climate change, and to reduce our contribution to its causes. It covers areas where discussions with regional and local stakeholders suggest that current work and programmes on their own will not deliver the outcomes required and joint action will be required. Its framework for action is divided into seven key priority areas with a further three cross cutting themes.

PRIORITIES

- **STRATEGY AND MONITORING**, because new regional and local plans such as the Integrated Regional Strategy, Sustainable Community Strategies and Multi Area Agreements are being developed. The latest information on climate change impacts and forecasts needs to be an integral part of them. The Plan puts a responsibility on the region to track progress and take remedial action where necessary.
- **THE BUILT ENVIRONMENT**, because almost half of our carbon emissions come from the operation of our housing stock. Although the Government aims to have all new build carbon neutral from 2019, at least 70% of the housing stock we will have in 2050 is already built to much lower carbon efficiency standards.

- **TRANSPORT**, because around 30% of greenhouse gas emissions come from transport. Research also tells us that making significant progress will be very difficult without a big reduction in car use or the development of low carbon alternatives.

- **HEALTH SERVICES**, because the health sector must deal with the growing impact of extreme weather on health and welfare, which will get more serious as the population ages. The health sector also generates significant carbon emissions.

- **BUSINESS**, because industry and business account for around a quarter of carbon emissions, and because there are major business opportunities in developing low carbon technologies, products and processes.

- **LAND MANAGEMENT**, because the way the land is managed needs to adapt to changing weather patterns and can help to increase the resilience of the region to the impact of climate change. Different land management practices can also reduce the impact of change on species and agriculture, as well as create opportunities for sustainable food and energy supply, and carbon sequestration.

- **CITIZEN ENGAGEMENT**, because adapting to change and reducing future emissions require all of us to be prepared to do things differently and to make choices which at first seem difficult and inconvenient.



CROSS CUTTING THEMES

- **ENERGY**, because the consumption of fossil fuel based energy sources is the biggest direct influence on the volume of greenhouse gas emissions.

- **WASTE**, because waste streams are important potential sources of materials and energy. Increasing recycling and reducing landfill will significantly reduce greenhouse gas emissions.

- **WATER**, because the pressures on water resources and water and sewerage infrastructure will increase. Water efficiency is key to reducing the impact of water treatment and pumping on carbon emissions and ensuring security of water supply over the longer term. The region already recognises its vulnerability to flooding and must improve resilience to increased flood risk as a result of climate change.