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The Climate Change Challenge for North Yorkshire

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- **Climate Projections 09**
- **The National Challenge**
- **The Regional Response**

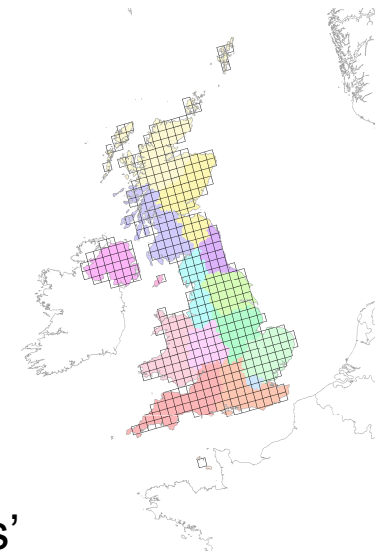


UK Climate Projections 09

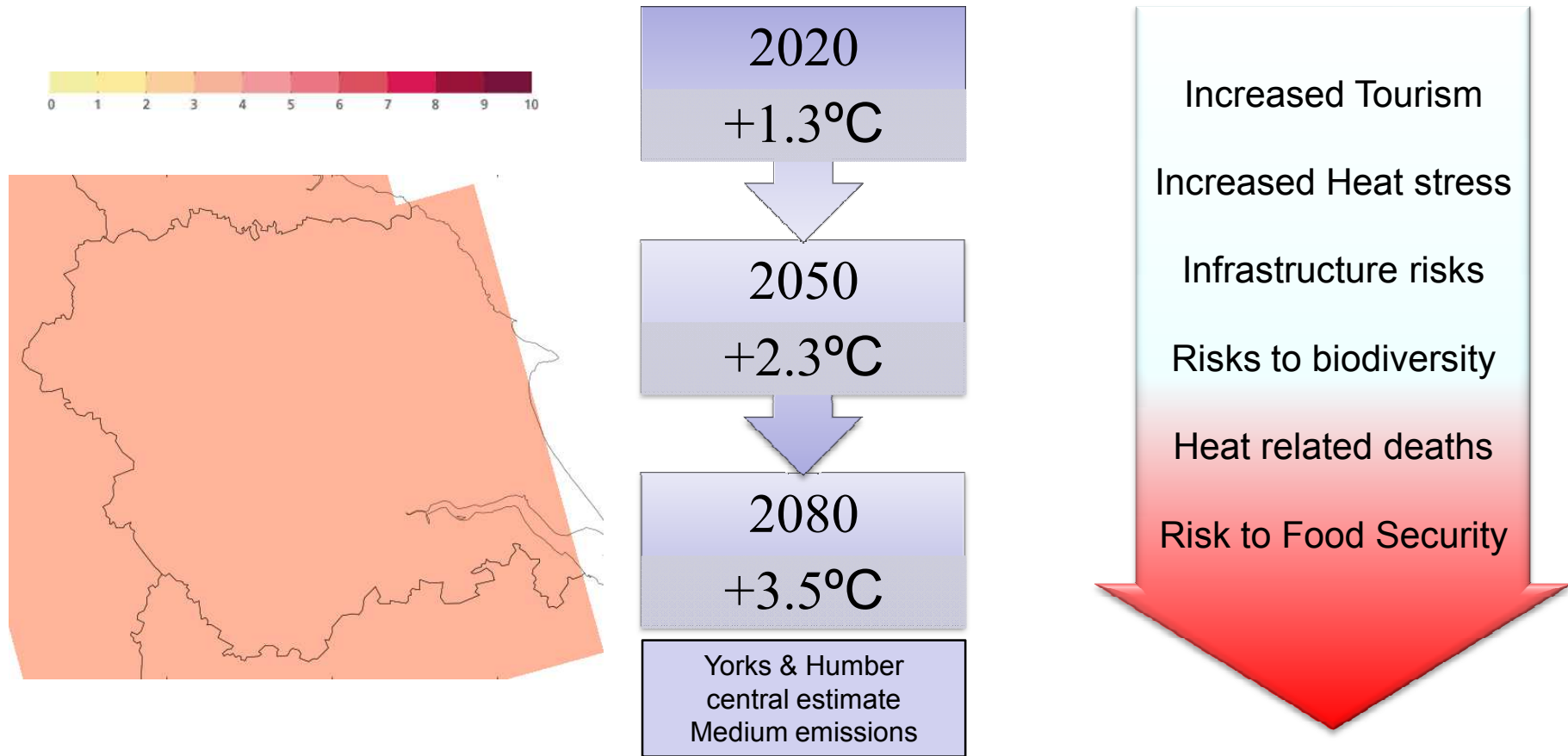


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- § These projections of our future climate have been developed by the Met Office paid for by Defra
- § They show us the reality of climate change and help us understand both the importance of the need to reduce our emissions and adapt to inevitable changes
- § A great deal of information is available including pre-prepared maps and graphs, which are available online to anyone
- § A report 'Adapting to Climate Change: UK Climate Projections' setting out what the Government is doing on adaptation is available, plus further reports on the science underpinning the projections by UKCIP



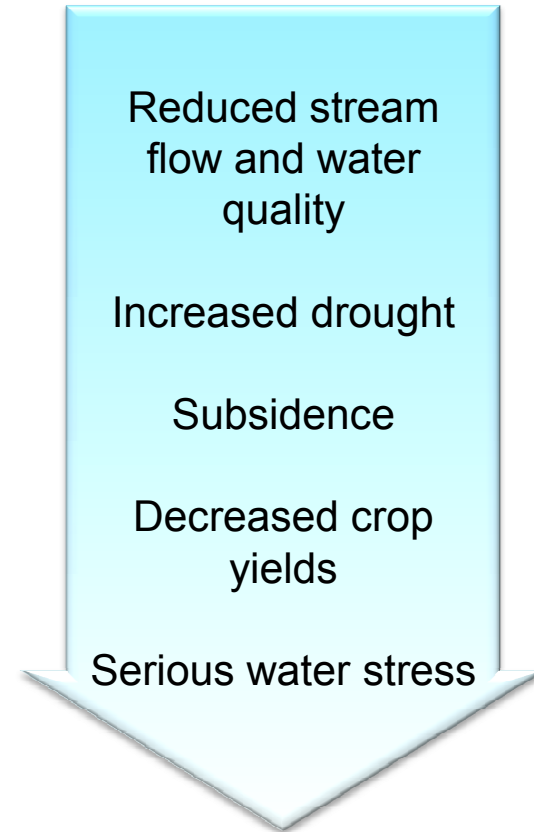
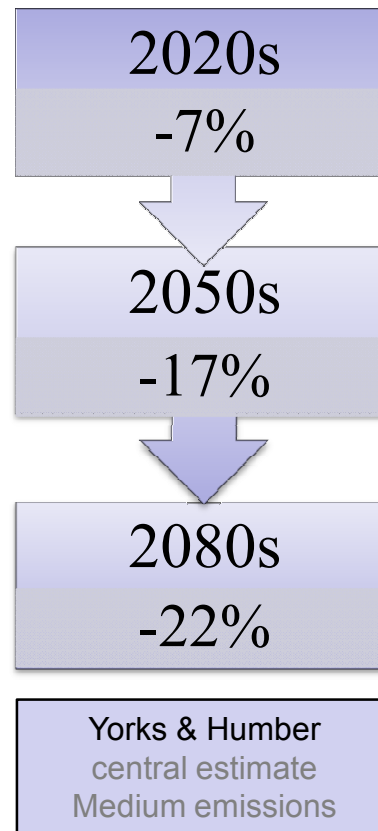
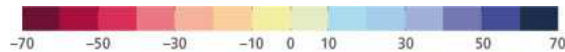
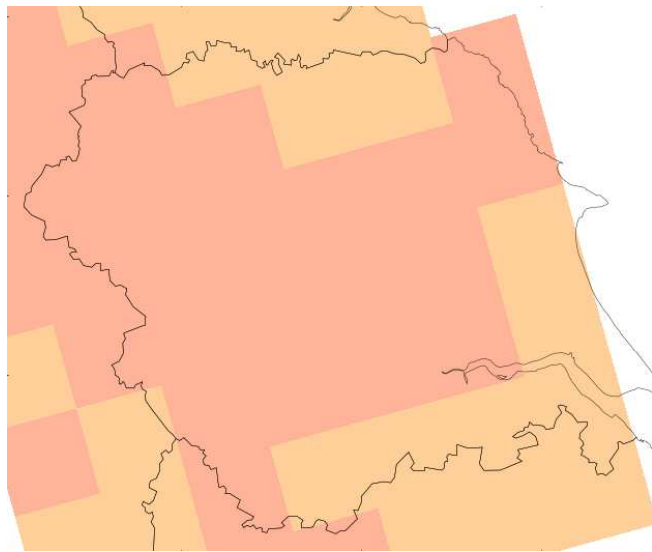
For summer average temperature, we see significant increases over the decades to the 2080



The change for the 2080s is very unlikely to be less than 1.8°C and very unlikely to be more than 5.8°C



For summer rainfall we could see significant decreases



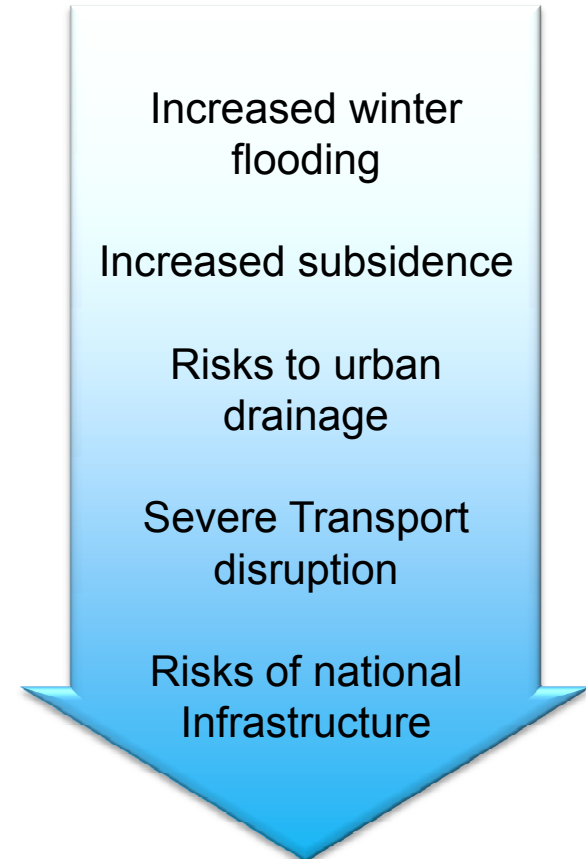
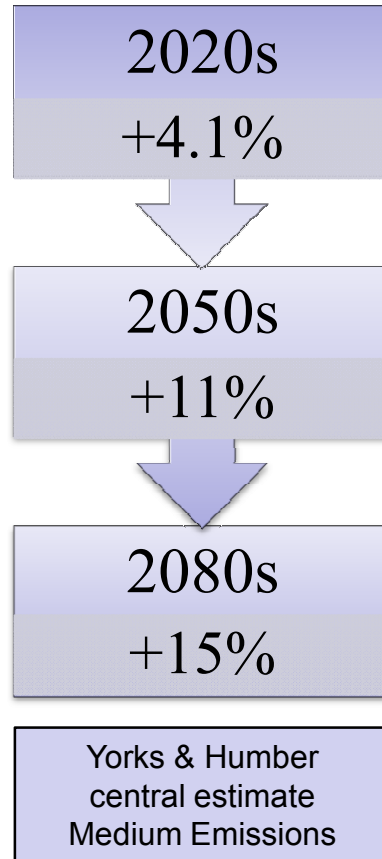
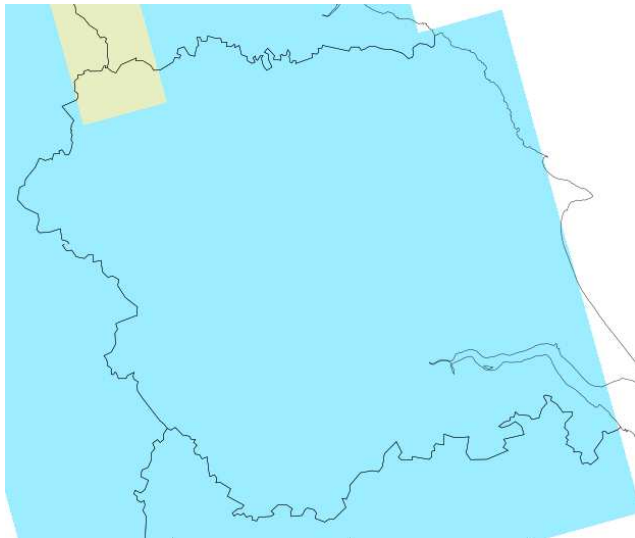
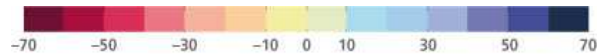
For the 2080s the change is very unlikely to be lower than -43% and very unlikely to be higher than +1%



For winter rainfall we see significant increases



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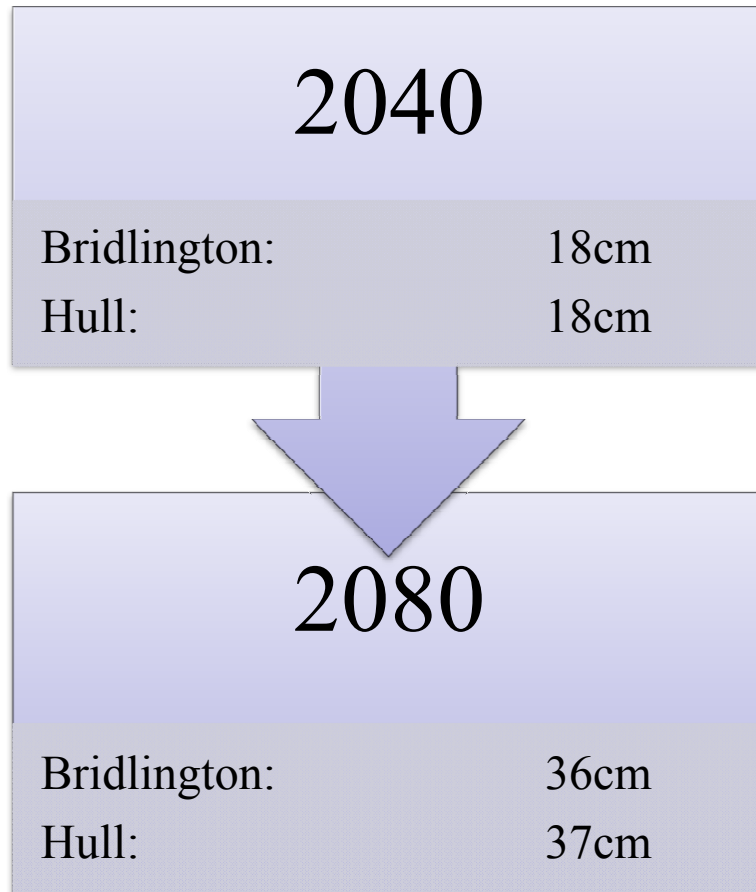
For the 2080s the change is very unlikely to be lower than +2% and very unlikely to be higher than +33%



Along the coast: significant sea level rises



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How to access and learn about the projections



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- Further information on the Defra website at:
www.defra.gov.uk/adaptation
- For access to the UKCP User Interface go to:
<http://ukclimateprojections.defra.gov.uk>
- Projections in Practice week –seven different sessions
21-24th September, Leeds
bookwhen.com/pip-week-yorkshireandhumber



The National Challenge on Climate Change



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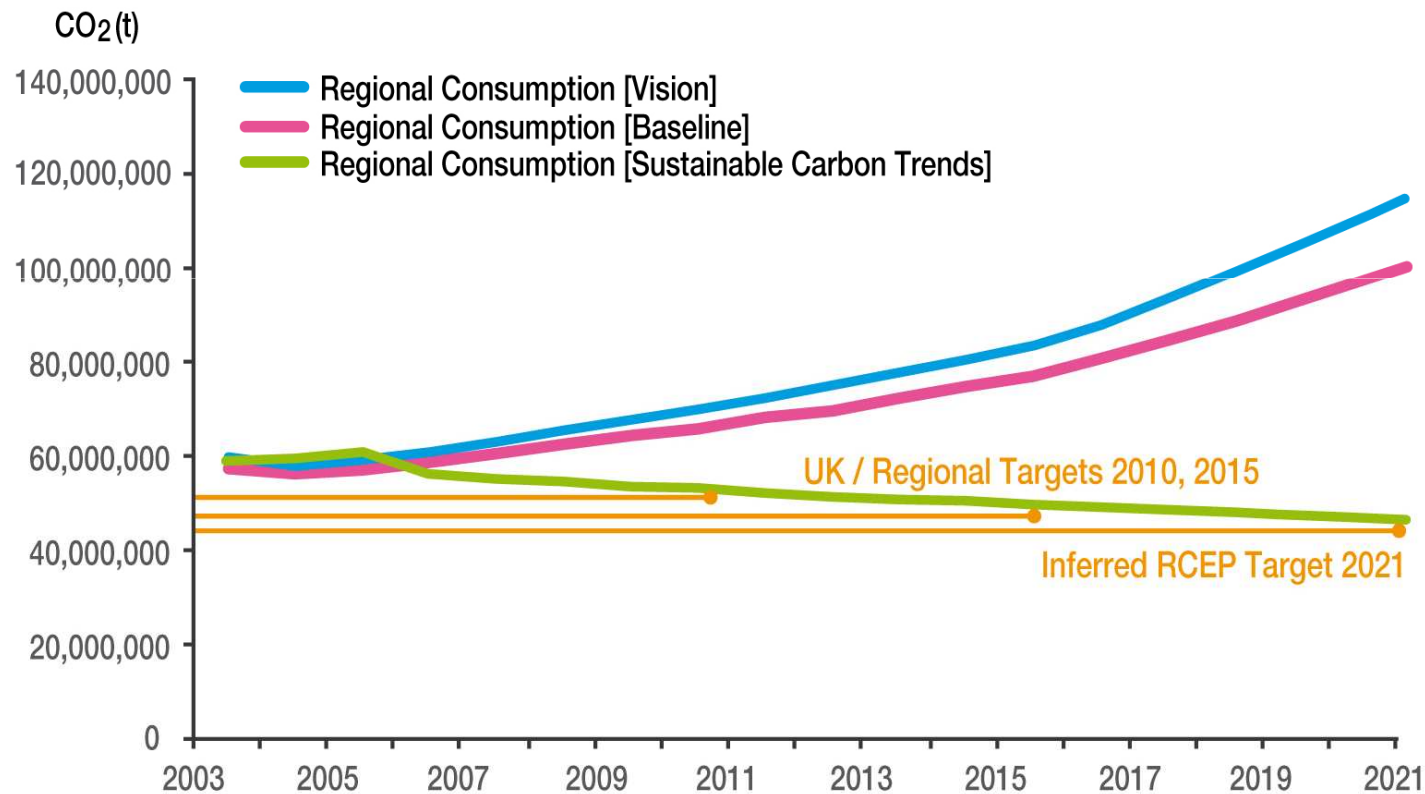
- Climate Change Act - at least an **80%** cut in greenhouse gas emissions **by 2050**, to be achieved through action in the UK and abroad.
- Also a reduction in emissions of at least **34%** by **2020**.
- Low Carbon Transition Plan includes **40%** of electricity will be from low carbon sources, from renewables, nuclear and clean coal by **2020**
- Renewable Energy Strategy – **15%** energy from renewables by **2020**



Regionally Existing plans and strategies will not deliver our CO₂ reduction targets



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Regional Response



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Climate Change Plan for Yorkshire and the Humber

Your Climate, Our Future

2009 – 2014



Key Priorities



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- Strategy and monitoring
 - The built environment
 - Transport
 - Health Services
 - Business
 - Land management
 - Citizen engagement
- Mostly being taken forward by existing groups and Boards – progress reported to Partnership



Cross Cutting Themes



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- Energy
- Waste
- Water



Regional Coordination



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- a responsive document
- a living document
- adaptation taken forward
- monitoring and review



Delivery Mechanisms



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- Integrated regional strategy
- Regional improvement and efficiency partnership
- Local area agreements
- Networks



Information on how to act - mitigation



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Top ten interventions to cut regional carbon emissions study (June 2009)

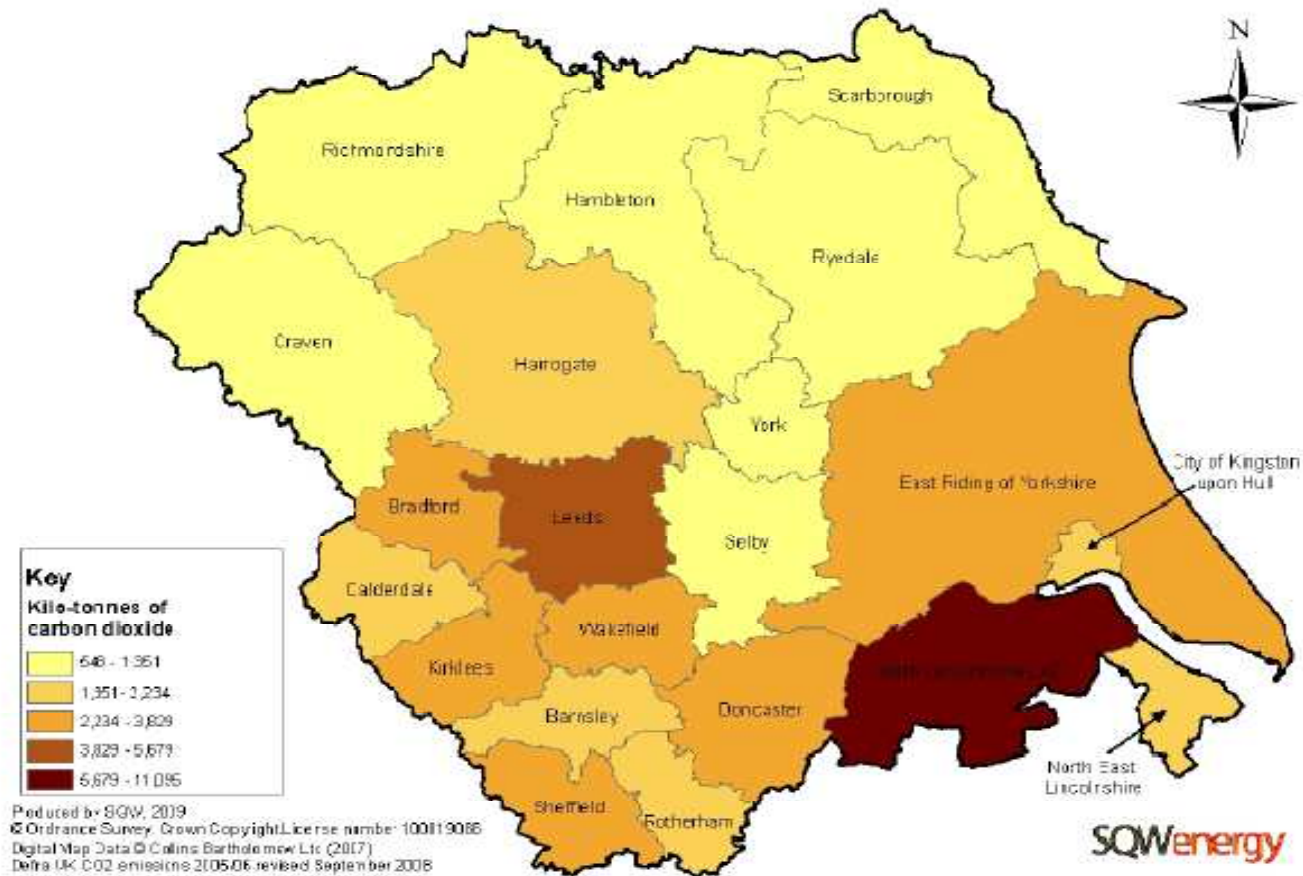
- identified the “top 10” most viable and cost effective interventions, which together could reduce the region’s carbon emissions baseline by up to 23% by 2020 (compared to a 2006 baseline)
- On basis of energy consumption, in 2006 Y&H emitted 53.3 million tonnes of carbon dioxide:
 - 53% Industry and Commerce
 - 24% Domestic
 - 22 % Road Transport
 - 1% Land use, Land use change & Forestry



Total regional carbon emissions by local authority, 2006



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Source: SQW Energy using data from Defra 2006



Areas of potential impact by source and local authority area (ktCO₂)



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Local Authority	Industry & Commerce	Domestic	Road Transport	Total
Craven	176	159	208	548
Hambleton	337	235	498	1104
Harrogate	492	443	691	1663
Richmondshire	134	128	294	556
Ryedale	242	141	215	625
Scarborough	331	302	202	841
Selby	569	212	465	1260
North Yorkshire Total	2281	1620	2573	6597

Source: Defra 2008



Information on how to act - adaptation



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Yorkshire and Humber Regional Adaptation Study



www.adaptyh.co.uk



Local Impacts and Adaptations



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YORKSHIRE AND HUMBER CLIMATE CHANGE ADAPTATION STUDY LOCAL AREA REPORT RIDDING AND WHARF DISTRICTS	
Location	
Summary of Issues	<p>It is clear from the evidence of the many studies reviewed, that the climate change is a major risk to the Ridding and Wharfe Districts.</p>
Key Climate Change Findings	<p>The results of the climate change risk assessment for the Ridding and Wharfe Districts, based on the climate change scenarios for 2050, are as follows:</p> <ul style="list-style-type: none">• Long term annual rainfall may increase or fall to between 60-70% of annual rainfall depending on the scenario used.• The annual average number of hot days will increase.• Winter wind speeds are expected to increase.• Winter average monthly sea level rise is projected to be between 10-20cm by 2050. <p>These findings have implications for the Ridding and Wharfe Districts and will require strategic and tactical (Planning) considerations.</p>



Key Messages

North Yorkshire is at particularly at risk from the impacts of climate change and we have to prepare for this. The new projections confirm that if we fail to act to reduce emissions this could get much worse across the county in years to come.

Confirms determination to act rapidly now and utilise our natural resources and people to take up the fight against climate change – leading the way on our own behaviour, on many forms of renewable energy and green jobs of all types.

We also see this as a way to help us move forward sustainably from the current economic down turn and to help our communities to reduce other problems such as fuel poverty



Further information



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