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The Climate Change Challenge for North Yorkshire

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North Yorkshire Strategic Partnership
Wider Partnership Conference
Pavilions of Harrogate
15 October 2009





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

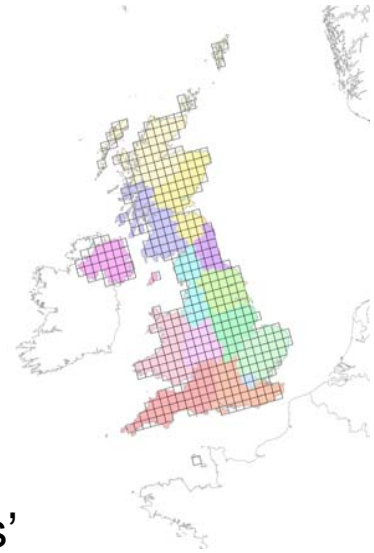


UK Climate Projections 09



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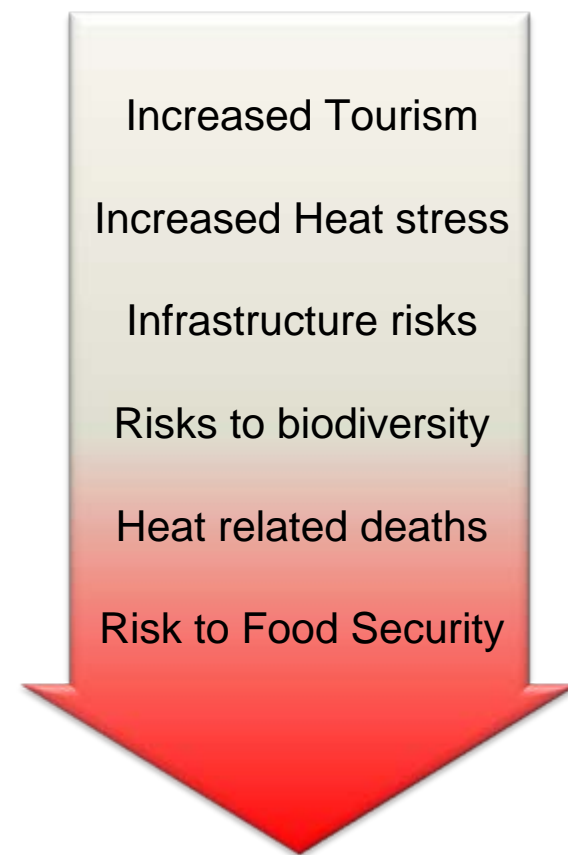
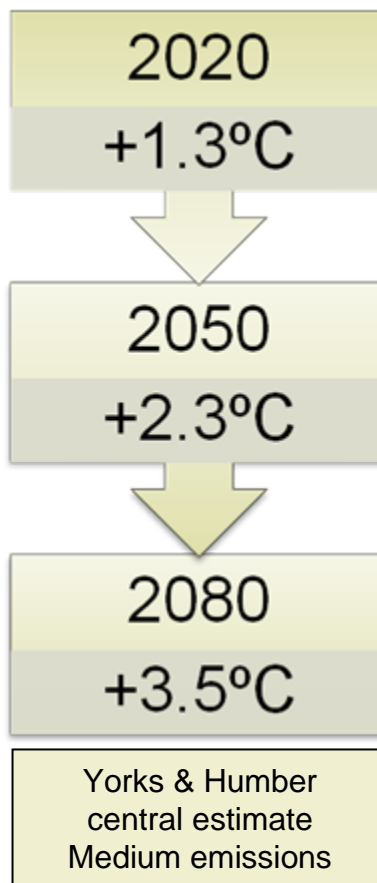
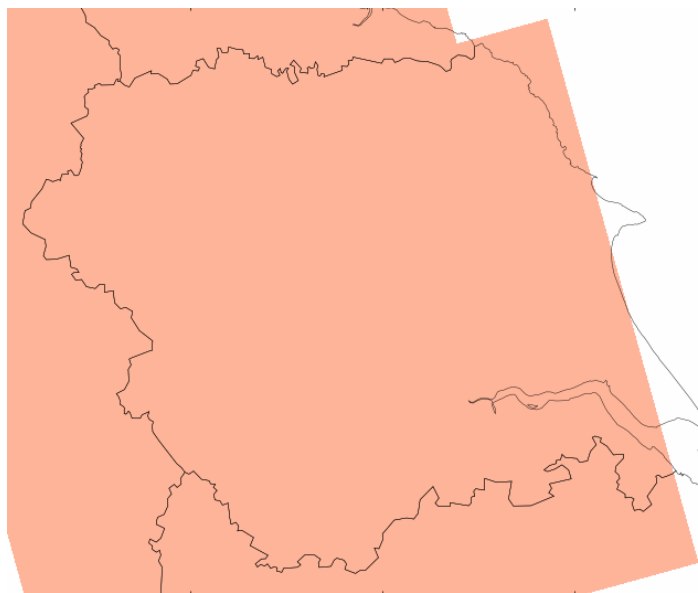
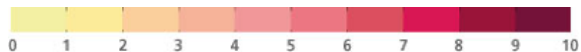
- These projections of our future climate have been developed by the Met Office paid for by Defra
- They show us the reality of climate change and help us understand both the importance of the need to reduce our emissions and adapt to inevitable changes
- A great deal of information is available including 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



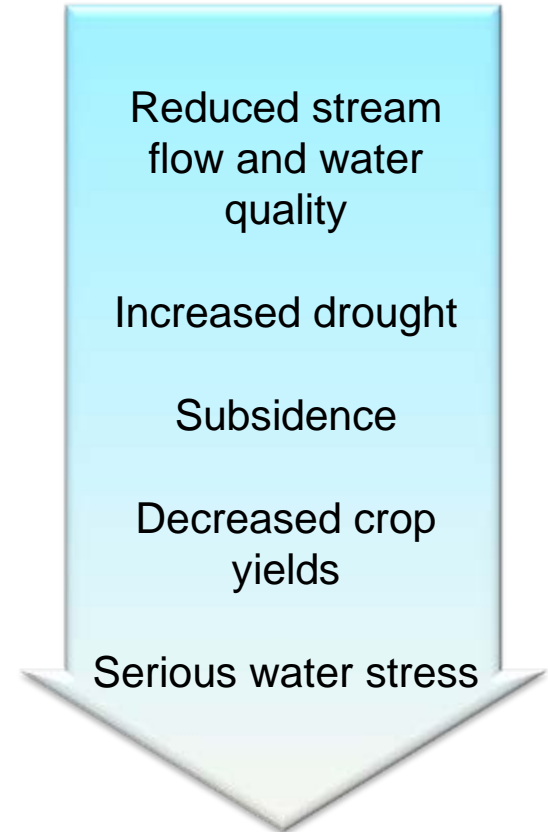
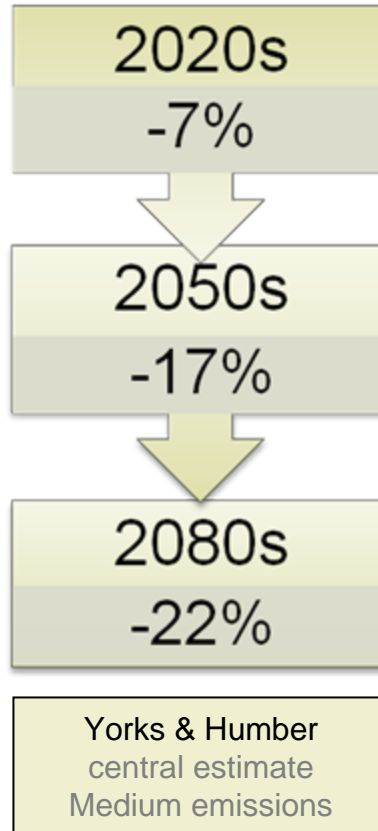
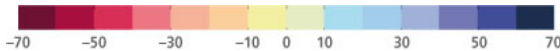
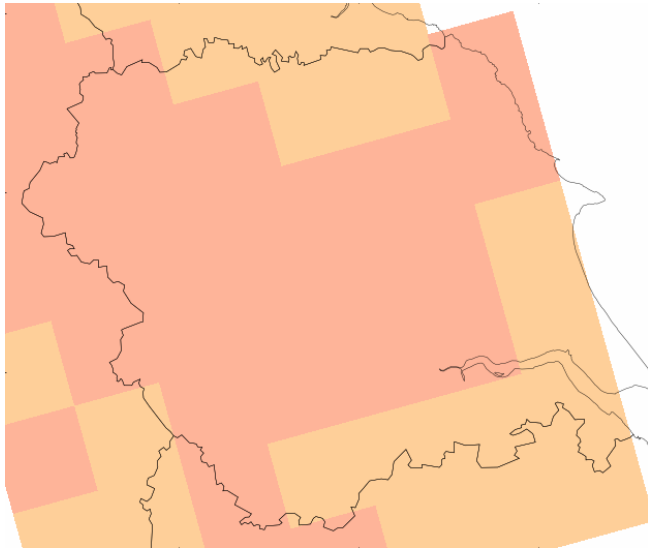
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The change for the 2080s is very unlikely to be less than 1.8°C and very unlikely to be more than 5.8°C



For summer rainfall we could see significant decreases

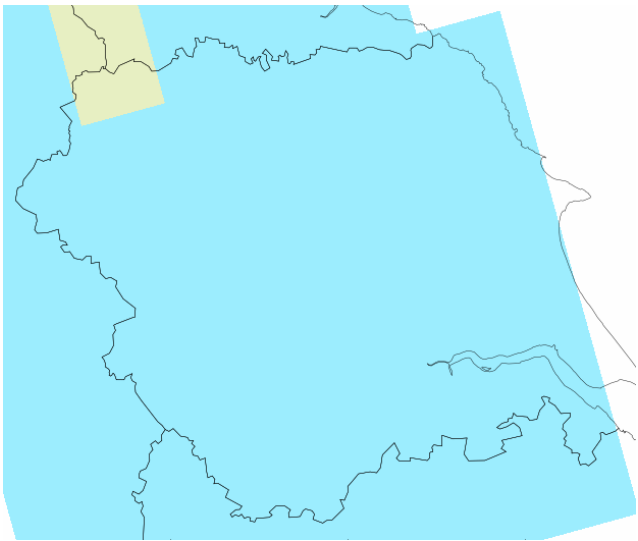
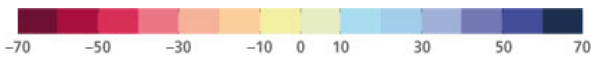


For the 2080s the change is very unlikely to be lower than -43% and very unlikely to be higher than +1%





For winter rainfall we see significant increases

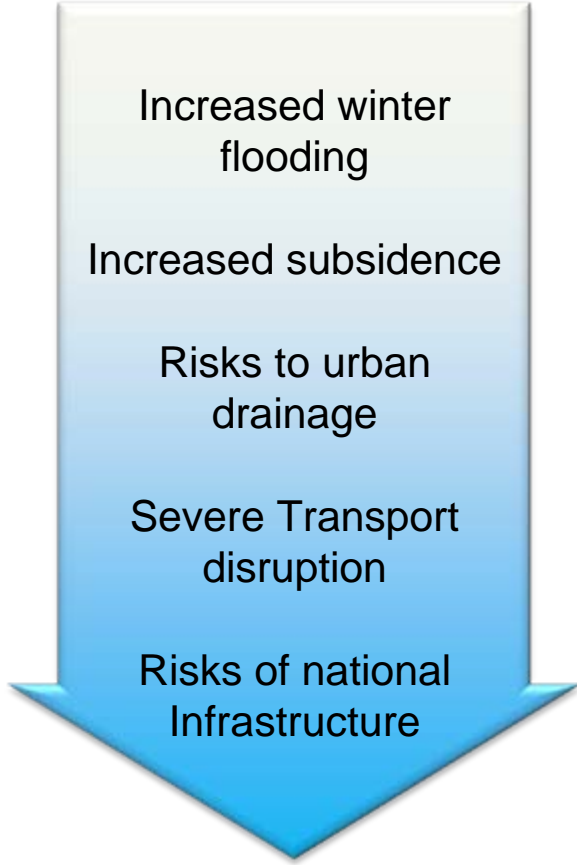


2020s
+4.1%

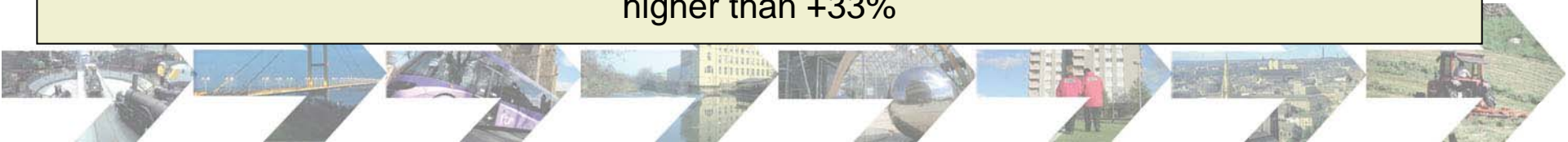
2050s
+11%

2080s
+15%

Yorks & Humber
central estimate
Medium Emissions



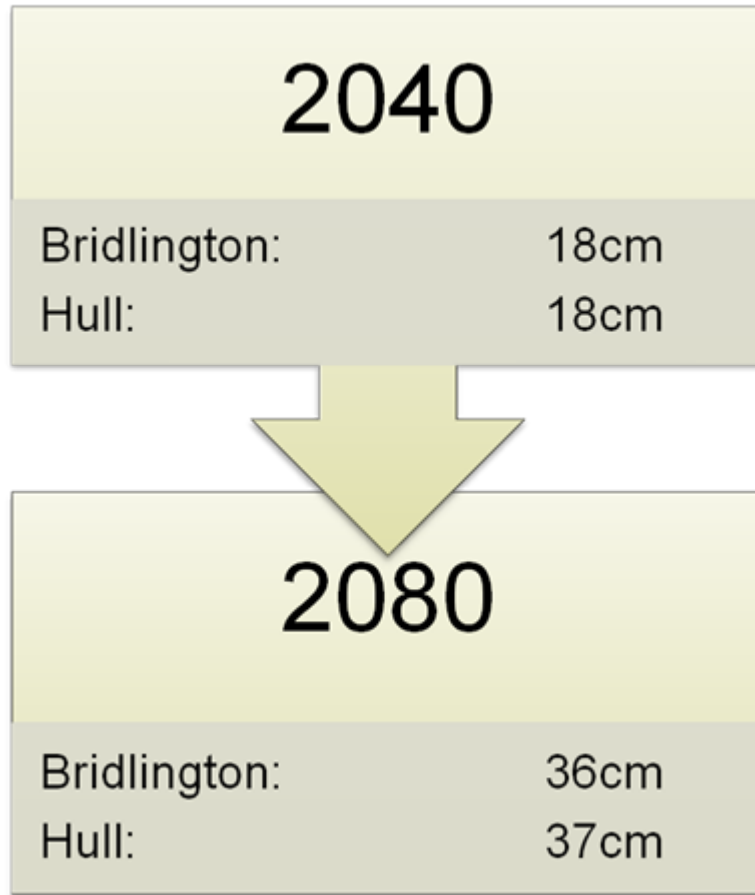
For the 2080s the change is very unlikely to be lower than +2% and very unlikely to be higher than +33%



Along the coast: significant sea level rises



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How to access and learn about the projections

- 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**



Regional Response



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Climate Change Plan for Yorkshire and the Humber

Your Climate, Our Future

2009 – 2014



Key Priorities

- 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

- 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)

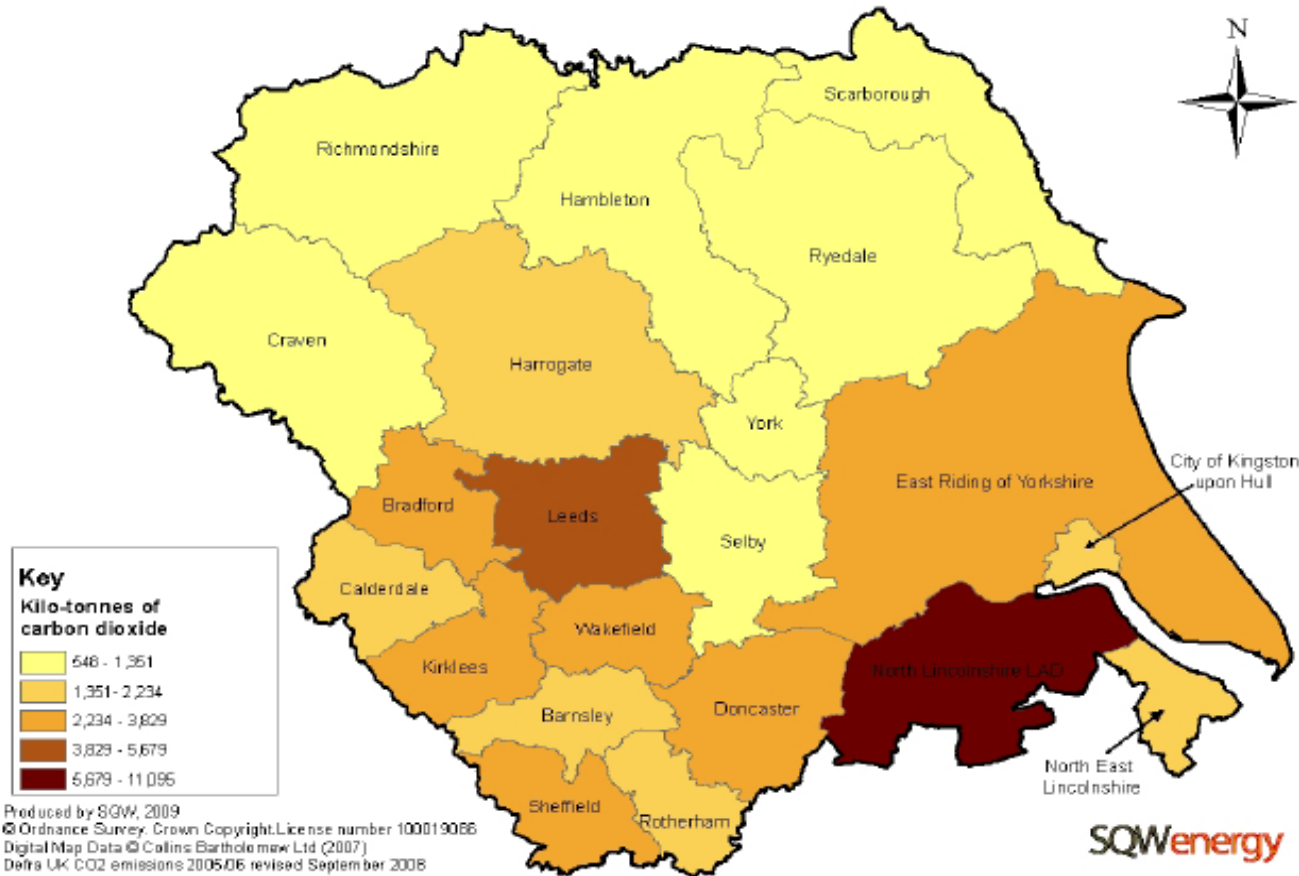
- identified the “top 10” most viable and cost effective interventions, which together could reduce the region’s carbon emissions baseline by up to 23% by 2020 (compared to a 2006 baseline)
- On basis of energy consumption, in 2006 Y&H emitted 53.3 million tonnes of carbon dioxide:
 - 53% Industry and 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 RICHMONDSHIRE DISTRICT	
Location	
Description of District	<p>A rural district which is one of the most sparsely populated districts in the county. A large part of the district is within the Yorkshire Coast National Park.</p>
Future Climate Projections	<p>The results of the modelling carried out for the Yorkshire and Humber Regional Climate Change Adaptation Study suggest that the following changes are likely by 2050:</p> <ul style="list-style-type: none"> • Long term annual minimum temperatures are set to increase by 3°C and annual minimum temperatures to rise to create 2°C. • The annual average number of hot days will rise slightly. • Winter wind speeds are predicted to rise marginally and • Winter average rainfall has the greatest rise in the study area with an extra 15.4mm (1-20%) predicted. <p>These figures relate to the nearest modelled cells, which were Skipton (Collingtree) and Airedale (Parishes of Airedale-Peab). </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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