

Yorkshire and Humber
Assembly

**Evaluating the
Contribution that Key
Regional Strategies
Make Towards
Addressing Climate
Change**

Final Report Appendices

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Final Report Appendices

May 2007

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Job number 122215

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Appendix A

**Regional Strategies
Reviewed**

A1 Regional Strategies Reviewed

No	Strategy	Originator	Rationale for Production
1	Advancing Together, 2003	Yorkshire and Humber Assembly	Regional Umbrella Document produced in response to Regional Government White Paper – Your Region, Your Choice.
2	Regional Sustainable Development Framework, 2003	Yorkshire and Humber Assembly	Regional Umbrella Document produced in response to Regional Government White Paper – Your Region, Your Choice.
3	Draft Regional Spatial Strategy (which includes Regional Transport Strategy), 2006	Yorkshire and Humber Assembly as RPB	Required by Planning and Compulsory Purchase Act 2004 and RSS has statutory status as part of the development plan.
4	Regional Economic Strategy, 2006	Yorkshire Forward (as RDA)	YF as the RDA has a statutory duty to produce a RES for the Region but the document itself is non-statutory.
5	Regional Housing Strategy, 2005	Yorkshire and Humber Assembly (new role, previously produced by Government Office)	Non statutory document introduced in Communities Plan 2003
6	Your Climate: Yorkshire and Humber's Climate Change Action Plan, 2005	Yorkshire and Humber Assembly, Yorkshire Forward and Government Office for Yorkshire and the Humber forming a Climate Change Steering Group.	Need for strategy originated from RSDF.
7	Regional Waste Strategy: Lets Take It From The Tip, 2003	Co-ordinated by YHA but produced by Regional Technical Advisory Body (RTAB)	Regions response / contribution to EU Waste Directives and PPS10
8	Regional Energy Infrastructure Strategy, 2006	Yorkshire and Humber Assembly on behalf of the Regional Energy Forum (GOYH, YHA and YF).	Region's response to the Energy White Paper
9	Regional Cultural Strategy	Yorkshire Cultural Consortium	No statutory regional vision
10	Regional Environment Enhancement Strategy, 2003	Yorkshire and Humber Regional Environment Forum	Need for strategy originated from RSDF.
11	Regional Forestry Strategy For Yorkshire and Humber, 2005	Government Officer for Yorkshire and the Humber	Non-statutory document which seeks to marry national objectives with local aspirations.

No	Strategy	Originator	Rationale for Production
12	Our Region, Our Health - A Regional Strategic Framework for Public Health and Y&H, 2004	Led by Regional Public Health Group (DoH, GOYH, YF and strategic health authorities in the region)	Region's response to Government's 'Choosing Health' guidance into a framework for Yorkshire and the Humber
13	Yorkshire and Humber Vision for Coal, 2005	Commissioned by Yorkshire Forward and undertaken on behalf of the Regional Energy Forum (GOYH, YHA and YF)	Region's response to Government Strategy for carbon abatement technologies (CATs) for fossil fuels.
14	Yorkshire Manufacturing Action Plan, 2003	Led by Yorkshire Forward supported by YHA	Region's response to national Manufacturing Strategy (2002). Makes connections between national guidance and the RES.
15	Farming for Food a Framework for Change	Led by Yorkshire Forward and Government Officer for Yorkshire and the Humber	Region's response to Defra's Strategy for Sustainable Farming and Food (SSFF). Focuses on which element of the SSFF Yorkshire and the Humber region is strongest to deliver on.
16	Improving your environment: summary of our work in the Yorkshire and Humber Region 2006 – 11	Environment Agency	Environment Agency's corporate strategy for the region up to 2011. Regional chapter of the Agency's national corporate strategy.
17	Yorkshire and Humber Regional Funding Allocation, 2006	Jointly by Yorkshire Forward and Yorkshire and Humber Assembly	Required by government to inform the funding allocation for the region.

Appendix B

**Evaluation of Regional
Strategies**

B1 Evaluation of Regional Strategies

Regional Strategy	Influence / potential to respond to Climate Change Agenda	Production Related Greenhouse Gas Emissions	Consumption Related Greenhouse Gas Emissions	Adaptation to Potential Impacts of Climate Change	Meeting Full Potential?
Advancing Together, 2003	Set direction for how other regional strategies should respond to climate change agenda.	Does not include specific policies or vision in relation to how the region should seek to reduce production related greenhouse gas emissions but does include indicators (against which regional performance will be measured) relating to Energy consumption, Transport Use and Traffic Congestion.	Does not include specific policies or vision in relation to how the region should seek to reduce consumption related greenhouse gas emissions but does include indicators (against which regional performance will be measured) relating to energy consumption and transport use.	Does not include specific policies or vision relating to adaptation but it does have an objective which seeks to deliver High Quality Environments. This objective is measure using indicators which include biodiversity and emissions.	Shortly to be replaced by IRF which could make climate change a more mainstream issue and seek to strengthen the linkages between strategies is responding to the challenges climate change presents.
Regional Sustainable Development Framework, 2003	Climate change is a key sustainable development issue so the RSDF can set the direction for how whole region should respond to climate change agenda.	Sets a number of specific aims and actions to improve energy efficiency, increase the amount of renewable energy which is produced and reduce emissions from transport (via modal shift of passengers and freight and improving vehicle efficiency).	Sets a number of specific aims and actions to reduce consumption related greenhouse gas emissions from domestic, commercial and industrial sources, increase the amount of renewable energy consumed and reduce the distance required to travel.	Sets out a number of guiding principles about how the region should be seeking to adapt e.g. prevent inappropriate development on the floodplain.	Shortly to be replaced by IRF which could build on the positive elements of the RSDF and make climate change a more mainstream issue and seek to strengthen the linkages between strategies is responding to the challenges climate change presents.

Regional Strategy	Influence / potential to respond to Climate Change Agenda	Production Related Greenhouse Gas Emissions	Consumption Related Greenhouse Gas Emissions	Adaptation to Potential Impacts of Climate Change	Meeting Full Potential?
<p>Draft Regional Spatial Strategy (which includes Regional Transport Strategy), 2006</p>	<p>The Regional Spatial Strategy translates the vision for the Region into a spatial plan. It operates within a statutory remit and is an important vehicle for collaboration between different regional agencies and their strategies</p> <p>The RSS sets direction for the location and quantity of new development.</p> <p>This RSS has the ability assist the region in meeting its challenging targets relating to climate change but it is important to remember that the RSS has less influence over issues facing existing development.</p>	<p>Includes positive targets and policy to increase efficiency, and increase the contribution from renewable and low carbon sources which will help to reduce production related greenhouse gas emissions particularly for Industry, Power Generation and Agriculture. It also encourages modal shift of passengers and freight.</p> <p>The RSS is also charged to focus on growth and development (with targets set for increase in housing) which will inevitably result in increased demand for energy and hence production related emissions, although new development makes up a very small proportion of total stock.</p>	<p>Supports travel related options which will result in reduced consumption of carbon based fuels and reduce the need to travel. It also seeks to minimise resource demands from development.</p>	<p>Includes policy to ensure the location of new development firstly avoids areas sensitive to the impact of climate change (i.e. in proximity to areas at risk of flooding, sea level rise and vulnerable water resources) and where unavoidable, is able to adapt to the impacts.</p>	<p>Draft RSS makes a positive effort to reduce production related greenhouse gas emissions and manages the need for new development to adapt to climate change.</p> <p>Policy YH2 Climate Change and Resource Use, includes activities that will help to reduce both production and consumption related emissions and help the region to adapt.</p> <p>The Panel Report due shortly will comment on whether it considers the plan's approach to climate change appropriate.</p>

Regional Strategy	Influence / potential to respond to Climate Change Agenda	Production Related Greenhouse Gas Emissions	Consumption Related Greenhouse Gas Emissions	Adaptation to Potential Impacts of Climate Change	Meeting Full Potential?
<p>Regional Economic Strategy, 2006</p>	<p>The Regional Economic Strategy translates the regional vision from Advancing Together and the objectives within the RSDF. It adopts a strong economic focus but had the ability to influence how business, industry and regeneration initiatives respond to climate change.</p>	<p>The Regional Economic Strategy seeks to consider how and encourage the region to reduce production related greenhouse gas emissions, for example, via transition to a low carbon economy through encouraging business to be more efficient. It is also concerned about the security of energy supplies so encourages more renewable energy and higher rates of bio-mass co-firing in power stations.</p> <p>The Regional Economic Strategy expresses a desire to work with the aviation industry to reduce emissions.</p>	<p>The Regional Economic Strategy includes a consumption related greenhouse gas emissions target.</p> <p>The strategy recognises the opportunities to reduce consumption related greenhouse gas emissions within the travel sector, for example by encouraging walking and cycling and supporting the growth of Environmental Technology Sectors</p>	<p>The Regional Economic Strategy acknowledges that climate change may lead to increased pressure on the region's water resources and the need to apply high energy efficient and environmental design standards to buildings.</p> <p>However, it does not make the link that some of its wider policy objectives will need to consider how to adapt to the wider consequences of climate change. For example the expansion of the Humber Ports complex will over time need to adapt to sea level rise and flood risk and the agricultural policy will need to adapt to a longer growing season but potentially more pests.</p>	<p>The Regional Economic Strategy takes positive steps in seeking reduce production related greenhouse gas emissions but is weaker in actively seeking (as opposed to just recognising the need) to reduce consumption related greenhouse gas emissions and at understanding the implications of some of its wider policy objectives on adaptation to climate change.</p>

Regional Strategy	Influence / potential to respond to Climate Change Agenda	Production Related Greenhouse Gas Emissions	Consumption Related Greenhouse Gas Emissions	Adaptation to Potential Impacts of Climate Change	Meeting Full Potential?
Regional Housing Strategy, 2005	<p>The Regional Housing Strategy seeks to influence the creation and management of housing and communities to create sustainable communities.</p> <p>It has the ability to reduce production and consumption emissions associated with the domestic sector by linking national guidance to local action.</p>	<p>Applies national Energy Efficiency Commitment to the region and encourages Local Authorities to consider promoting renewable energy sources and combined heat and power.</p>	<p>Encourages housing development which minimises car dependency and usage.</p>	<p>The Housing Strategy has a strong focus on building standards and opportunities relating to sustainable construction. However it doesn't fully consider the implications of climate change on future demographics and doesn't consider how building standards could respond to water demand and flood risk.</p>	<p>The current Regional Housing Strategy has more influence over the social housing sector but this only make up around 10% of total stock. The Regional Housing Strategy could consider how it may be able to improve the efficiency of existing private stock. Linked to this it should also consider how the existing stock may be able to adapt to the implications of climate change.</p>
Your Climate: Yorkshire and Humber's Climate Change Action Plan, 2005	<p>The Action Plan seeks to operate within regional strategic and delivery frameworks to identify what needs strengthening and the tools to achieve this.</p> <p>This document is key to the region's approach to addressing climate change.</p>	<p>Supports measures in other regional strategies seeking reduce production related emissions.</p>	<p>Highlights the need to influence individual householders to effect change as behavioural aspects need to be addressed as much as physical aspects. Also highlights the need to tackle existing stock to significantly reduce emissions.</p>	<p>The action plan presents a detailed picture of the region's climate in the future and the implications of climate change and the need to adapt.</p>	<p>The Climate Change Action Plan understands the linkages with other regional strategies to achieve change to reduce production related emissions and highlights consumption and adaptation related issues. The IRF provides the opportunity to bring this action plan further into the mainstream and highlight the need for other strategies to support its delivery.</p>

Regional Strategy	Influence / potential to respond to Climate Change Agenda	Production Related Greenhouse Gas Emissions	Consumption Related Greenhouse Gas Emissions	Adaptation to Potential Impacts of Climate Change	Meeting Full Potential?
Regional Waste Strategy: Lets Take It From The Tip, 2003	Waste sent to landfill is a significant source of methane which is a greenhouse gas. The Waste strategy can influence how to reduce, recycle and dispose of our waste to reduce emissions.	The strategy translates EU and national waste policy by advocating the waste hierarchy. Its sets targets for reducing the amount of waste produced per household and the amount recycled which will help to reduce methane emissions. It highlights that energy from waste can provide alternative and more localised sources of energy but conversely can contribute to greenhouse gas emissions. The strategy therefore seeks to limit the number of energy from waste plants in the region.	The strategy seeks to highlight to businesses that their waste can be an asset to be sold others and hence reduce the need to consume raw materials.	Advocates that waste minimisation should be key to building design, both through actual construction and the use of the building by occupiers. Does not link waste to other potential areas of adaptation such as agriculture and industry.	The strategy makes positive steps in seeking to reduce household waste related emissions but could forge stronger links with other regional strategies to understand how it could influence waste minimisation in the business, agriculture and industry which will also have the benefit of reducing production and consumption related greenhouse gas emissions.
Regional Energy Infrastructure Strategy, 2006	Sets the framework for integrated energy generation in the region. It therefore has the ability to influence how the region can reduce its greenhouse gas emissions associated with energy generation.	The strategy looks to reduce production related emissions associated with energy generation by setting targets for use of renewable and low carbon energy sources. It also encourages the development of further biomass fuel options.	Does not actively seek to reduce the consumption of energy in the region.	Highlights the need for more homes meeting BREEAM and Eco-homes standard.	The strategy performs well at tackling production related emissions but is weaker at addressing consumption of energy in the region and understanding how the need to adapt to the impacts of climate change may affect the region's ability to generate energy in the future.

Regional Strategy	Influence / potential to respond to Climate Change Agenda	Production Related Greenhouse Gas Emissions	Consumption Related Greenhouse Gas Emissions	Adaptation to Potential Impacts of Climate Change	Meeting Full Potential?
Regional Cultural Strategy	<p>The Regional Cultural Strategy seeks to link the work of individual people, organisations and agencies that have a bearing on quality of life in the region and aspires to everyone in the region leading a rich, diverse and fulfilling life with a strong sense of community and a healthy lifestyle.</p> <p>It can therefore have a role to play in influencing individual action in response to the challenge of climate change.</p>	<p>The strategy does not specifically address issues with a bearing on production related greenhouse gas emissions.</p>	<p>The strategy does not specifically address issues with a bearing on consumption related greenhouse gas emissions.</p>	<p>The strategy does not seek to address its potential influence on or the need to, adapt to climate change.</p>	<p>This strategy could add value to the suite of other regional strategies by influencing a culture change in relation to climate change mitigation and adaptation measures across individuals, communities, and the private and public sector.</p>

Regional Strategy	Influence / potential to respond to Climate Change Agenda	Production Related Greenhouse Gas Emissions	Consumption Related Greenhouse Gas Emissions	Adaptation to Potential Impacts of Climate Change	Meeting Full Potential?
<p>Regional Environment Enhancement Strategy, 2003</p>	<p>The Regional Environment Enhancement Strategy seeks to channel environmental context into policy and decision making relating to other key regional strategies. It can therefore help to ensure that climate change is considered appropriately.</p>	<p>The strategy has less of a focus on production related greenhouse gas emissions.</p>	<p>The strategy understands the implications of consumption patterns on greenhouse gas emissions and suggests a number of measures to tackle and measure this. For example, it recommends achieving net reductions in the consumption of energy through the application of an energy hierarchy. It also identifies that the provision of leisure and recreational activities near to communities can reduce the distance we travel.</p> <p>It also suggests implementing imaginative ways to reshape consumer choice in the purchase of food and other goods, in travel, domestic energy and water consumption.</p>	<p>The strategy understands the need for policy relating to adaptation. For example, it suggests examining flood risk on a river catchment level to link projects and connect funding. It also promotes sustainable design and construction.</p>	<p>The strategy understands the impact of consumption patterns and the need to adapt to a changing climate. This needs to translate across to other regional strategies and also be delivered.</p> <p>It is not clear how measures identified in this strategy are implemented to deliver results on the ground.</p>

Regional Strategy	Influence / potential to respond to Climate Change Agenda	Production Related Greenhouse Gas Emissions	Consumption Related Greenhouse Gas Emissions	Adaptation to Potential Impacts of Climate Change	Meeting Full Potential?
Regional Forestry Strategy For Yorkshire and Humber, 2005	<p>The Regional Forestry Strategy seeks to identify important issues and opportunities for this region's trees and woodlands so this can be reflected in other regional strategies.</p> <p>It can therefore highlight the role that trees and woodlands can play in addressing climate change.</p>	<p>The strategy states that wood can be a source of renewable energy/ woodfuel reducing reliance on fossil fuels. Burning wood would increase greenhouse gas emissions but if the wood used is replanted, this would result in a reduction of net greenhouse gas emissions.</p> <p>The strategy highlights that much of the timber produced in this region is exported outside of the region for processing. There are emissions associated with the transportation of this timber.</p>	<p>The strategy focuses less on consumption related greenhouse gas emissions although does highlight that it is preferable to recycle wood products.</p>	<p>The strategy considers how forestry and tree planting can have a positive influence on adaptation in response to a changing climate.</p> <p>For example, trees and woodlands can help reduce the risk of flooding and soil erosion.</p>	<p>This strategy has made very positive linkages to understand how it can contribute to addressing climate change.</p> <p>Other strategies should seek to incorporate or link with the measures suggested in the Forestry Strategy.</p>
Our Region, Our Health - A Regional Strategic Framework for Public Health and Y&H, 2004	<p>Seeks to address the region's health issues and sets a framework for better health for all.</p> <p>Evidence suggests that healthy lifestyles and diets have a lower 'carbon footprint' so have the additional beneficial effect of reducing greenhouse gas emissions.</p>	<p>The Public Health Sector is one of the larger public services and hence has significant energy and resource demands.</p>	<p>The strategy makes linkages with other strategies (such as the Regional Housing Strategy) to help improve our lifestyles and the way in which we live. This can have the additional benefit of addressing consumption related emissions.</p>	<p>The strategy does not directly address adaptation.</p>	<p>The health sector as a public service could make a largest contribution to reducing its own greenhouse gas emissions. The healthy lifestyles promoted by this strategy are also compatible with low carbon lifestyles.</p>

Regional Strategy	Influence / potential to respond to Climate Change Agenda	Production Related Greenhouse Gas Emissions	Consumption Related Greenhouse Gas Emissions	Adaptation to Potential Impacts of Climate Change	Meeting Full Potential?
Yorkshire and Humber Vision for Coal, 2005	<p>The Yorkshire and Humber Vision for Coal explores opportunities in this region to apply the national strategy for developing carbon abatement technologies (CATs).</p> <p>Although focused on the continued use of fossil fuels it can encourage the use of technological solutions and alternative materials to reduce emissions from the region's power stations.</p>	<p>Seeks to reduce carbon dioxide emissions by 50% via improving efficiency, technological solutions, co-firing biomass and using carbon capture and sequestration.</p> <p>There are also opportunities to capture methane from abandoned mines and use this to generate power.</p> <p>Dependency on coal originating from overseas will be dependent on heavy transport usage which may increase greenhouse gas emissions further.</p>	The strategy does not seek to address consumption related emissions.	The strategy does not seek to address adaptation to a changing climate.	The strategy seeks to make energy production cleaner. It would benefit from considering linkages with other strategies and initiatives such as farming for bio fuel generation, or implications of supply chains and transportation of fuel.

Regional Strategy	Influence / potential to respond to Climate Change Agenda	Production Related Greenhouse Gas Emissions	Consumption Related Greenhouse Gas Emissions	Adaptation to Potential Impacts of Climate Change	Meeting Full Potential?
Yorkshire Manufacturing Action Plan, 2003	<p>This Action Plan links national strategy to the Regional Economic Strategy and articulates what this means for manufacturers in the region.</p> <p>Acknowledge that this is an issue and purpose specific document but it could have implications for other strategies seeking to address the implications of climate change.</p>	<p>The Yorkshire Manufacturing Action Plan seeks to reduce the amount of energy and natural resources used in manufacturing. Highlights that this could be an asset to release economic value and avoid the costs for business associated with a potential climate change levy.</p> <p>However, overall the plan seeks to achieve growth in manufacturing productivity, especially in the cluster sectors identified in the Regional Economic Strategy.</p>	<p>There is less focus on the potential impact on greenhouse gas emissions through consumption of goods produced.</p>	<p>The strategy promotes sustainable construction techniques but does not link with other areas potentially requiring adaptation, including some which may be important to manufacturing such as the availability of water resources.</p>	<p>The Manufacturing Action Plan recognises that industry is vulnerable to changing legislation relating to climate change so there is a positive element for businesses to embrace efficiency, but strategy still seeks to grow output of manufacturing.</p> <p>Potential opportunity to support consumption of locally produced goods to reduce greenhouse gas emissions associated with the transportation of goods. The strategy would benefit from considering the implications of manufacturing location and how it could help to respond to issues such as flood risk.</p>

Regional Strategy	Influence / potential to respond to Climate Change Agenda	Production Related Greenhouse Gas Emissions	Consumption Related Greenhouse Gas Emissions	Adaptation to Potential Impacts of Climate Change	Meeting Full Potential?
Farming for Food a Framework for Change	This strategy translates a national Strategy of Sustainable Farming and Food to this region. Has the potential to influence how we produce and consume food in the region which can impact on the greenhouse gas emissions related to this sector.	The strategy is less focused on the sectors which are linked to production related greenhouse gas emissions but does includes positive measures such as promoting the production of crops for biomass for use in Combined heat and power plants.	A positive strategy which seeks to promote the value of Yorkshire Produce as best value and a sustainable choice to the region's residents. It also makes the link between food and promoting healthy lifestyles.	The strategy does not consider the potential opportunities and impact that a changing climate may have on agriculture, particularly how this will affect energy, water and resource demands for farming and how these may need to adapt.	The strategy fully supports food production in Yorkshire and the Humber but understands that this should be supported by sustainable consumption and procurement. Looking longer term, the strategy is weaker at addressing the inevitable need for the agricultural sector to adapt to the impacts of climate change.
Improving your environment: summary of our work in the Yorkshire and Humber Region 2006 - 11	Outlines the Environment Agency's action plan for this region over the period to 2011. In terms of climate change it can help to understand how the EA seek to increase awareness of the need to adapt to the implications of sea level rise and flooding.	States that the EA will assist regulated industry to reduce waste and improve energy efficiency It will also provide advice to the sectors which are the biggest resource users (chemical, textiles, iron and steel). This will help to reduce production related greenhouse gas emissions.	Highlights the need to improve domestic recycling.	Sets out what the EA will do to fund and raise awareness about the implications of sea level rise, flood risk and water resources.	The EA's regional corporate strategy makes a positive contribution as it provides a specific set of actions and identifies agencies to deliver these actions. It also seeks to link with other regional strategies and influence how they contribute to addressing climate change.

Regional Strategy	Influence / potential to respond to Climate Change Agenda	Production Related Greenhouse Gas Emissions	Consumption Related Greenhouse Gas Emissions	Adaptation to Potential Impacts of Climate Change	Meeting Full Potential?
<p>Yorkshire and Humber Regional Funding Allocation, 2006</p>	<p>The Regional Funding Allocation Document provides advice and seeks to justify the bid for the regional funding allocation and details how the funds will be spent.</p> <p>Priorities for expenditure may influence how the region can address climate change.</p>	<p>The Regional Funding Allocation does not explicitly tackle production related emissions.</p>	<p>Seeks funding to improve connectivity between urban areas, particularly in terms of public transport. It also seeks funding to provide high quality energy efficient homes in locations with good public transport access. This will help to tackle consumption related emissions.</p>	<p>Seeks funding to promote sustainable construction, but no direct links to other areas of potential adaptation.</p>	<p>The Regional Funding Allocation reflects the priorities of the three main strategies; the Regional Spatial Strategy, Regional Economic Strategy and Regional Housing Strategy. Therefore, it does include provision for some element of funding to help reduce greenhouse gas emissions but in the future there could be potential for funding to be more directly linked to tackling climate change.</p>

Appendix C

**Regional Strategy
Evaluation Proformas**

C1 Regional Strategies

C1.1 Advancing Together

Strategy Title	Advancing Together: A Revised Strategic Framework For Yorkshire and Humber (Final Consultation Draft)
Originator	Yorkshire and Humber Assembly
Published Date	August 2003
Target Area	Yorkshire and Humber Region
Statutory or Non Statutory?	The Regional Government White Paper - Your Region, Your Choice – called on Regional Assemblies to lead work in their regions to integrate regional strategies and monitor delivery. Advancing Together is Yorkshire and Humber Assembly’s response to the White Paper. It is a non-statutory document which provides the vision and basis for the RSS. It also establishes a shared strategic framework for key regional strategies such as the RHS and RES.
How the Strategy is Prepared?	<p>Advancing Together was first published in Summer 1998. Over the last two-and-a-half years the Yorkshire and Humber Assembly has held consultations on its update, both written and via the Assembly’s Commissions. The latest consultation began in May 2003 and a second draft version of Advancing Together was developed incorporating many of the views of the fifty plus organisations that responded.</p> <p>This second draft was considered by the Yorkshire and Humber Assembly in July 2003 where it was agreed to hold a further final stage of consultation. The final consultation draft was issued in August 2003.</p> <p>Advancing Together is prepared by the Yorkshire and Humber Assembly, an organisation of thirty-six members, who together represent agencies, businesses, and organisations in all sectors at regional, sub-regional and local level, and who will help deliver the vision for the region.</p> <p>The Assembly is responsible for:</p> <ul style="list-style-type: none"> • Preparation and keeping Advancing Together updated in full consultation with organisations from across the sectors in the region; • Securing commitment to, and involvement in, the delivery of the vision and objectives set out in Advancing Together; • Ensuring that organisations from across the sectors prepare strategies, plans and frameworks that take into account the regional vision and objectives, and contribute to their delivery; and • Monitoring progress towards achievement of the regional vision and objectives, and work with organisations to review and revise their strategies, plans, and frameworks to take account of that level of progress. <p>Advancing Together also outlines the responsibilities for stakeholders and communities across the Region. Organisations and businesses should:</p> <ul style="list-style-type: none"> • Consider how the regional vision and objectives could be incorporated into their corporate strategies and plans; • Find out from the Assembly how activity influences the high level regional indicators and use this information in annual reports to show

<p>Strategy Title</p>	<p>Advancing Together: A Revised Strategic Framework For Yorkshire and Humber (Final Consultation Draft)</p>
	<p>how they have helped the region make progress; and</p> <ul style="list-style-type: none"> • Ensure that their views are represented in local, sub-regional, and regional partnerships. These make and implement the policy that will help the region achieve our objectives. <p>Individuals should be aware of the region’s objectives and act on them locally. Note: this is the last edition of Advancing Together as it is due to be replaced by an Integrated Regional Strategy.</p>
<p>Decision Making Processes</p>	<p>Advancing Together aims to facilitate a co-ordinated partnership approach to strategy and delivery at regional, sub-regional, and local level.</p> <p>The vision will be realised, and the objectives delivered, by a range of organisations, businesses and individuals. Advancing Together does not set out exactly what each should do – this is left to specific strategies and plans. Instead, Advancing Together informs, integrates and directs strategic decision making for the region, and describes clearly what we are trying to achieve.</p> <p>There are many strategies and plans developed at regional, sub-regional and local, and sectoral or organisational level. These strategies and plans are delivered, targeted, and measured in different ways, yet all should fit within the regional strategic framework. The challenge for Advancing Together is to harness these strategies and plans alongside the four major regional strategies: the RES, the RSS, the Regional Culture Strategy and the Regional Housing Strategy to deliver our vision and objectives.</p> <p>Each year the region will assess achievements against the Framework’s six objectives, and agree what needs to be done to make more progress. This will be done by:</p> <ul style="list-style-type: none"> • Measuring progress towards achieving each objective using the indicators in Advancing Together; and • Publishing this information annually, alongside examples of regional excellence, in the Progress in the Region report. <p>Where monitoring indicators reveals a clear lack of progress, the Yorkshire and Humber Assembly will work with the owners of the relevant regional strategies to reassess direction and ensure successful delivery.</p>
<p>Purpose and Aims of the Strategy</p>	<p>Advancing Together provides the regional strategic framework within which individual strategies and plans for the region can sit and allows stakeholders to work together in a clear and accountable way towards common objectives.</p> <p>The framework supports the delivery of an agreed vision for Yorkshire and Humber, this is a “world class region of new economic opportunities, a restored and enhanced environment, and improved quality of life, all developed in a sustainable way”.</p> <p>Advancing Together has the following aims:</p> <ul style="list-style-type: none"> • Promote the sustainable economic, social and environmental well-being of the region; • Provide a single regional monitoring framework so progress can be effectively measured; • Establish a shared vision for Yorkshire and Humber;

Strategy Title	Advancing Together: A Revised Strategic Framework For Yorkshire and Humber (Final Consultation Draft)
	<ul style="list-style-type: none"> • Set out clear objectives to help actualise the shared vision; • Provide a framework for integrating key regional strategies; • Identify indicators for measuring progress in the region; and • Present a framework for sustainability appraisal against which all regional plans and strategies will be assessed. (Note this is the Regional Sustainable Development Framework and will be reviewed within a separate proforma). <p>Advancing Together identifies six objectives that the Region must work towards to achieve the agreed vision. These are:</p> <ol style="list-style-type: none"> 1. <u>An Advanced Economy</u>: Yorkshire and the Humber will have a world class, prosperous, and sustainable economy. 2. <u>Excellent Infrastructure</u>: Yorkshire and Humber will have physical infrastructure and communications that meet the needs of people, businesses, places, and the environment. 3. <u>High Quality Environments</u>: Yorkshire and Humber will have high quality natural and built environments. 4. <u>Educated and Skilled People</u>: Yorkshire and Humber will have exceptional education and training, widespread learning and skills, and a healthy labour market without skills gaps or shortages. 5. <u>First Class Quality of Life</u>: Yorkshire and Humber will be a socially cohesive and inclusive region. Our people will have the capacity, resources, and equitable access to quality services needed to live well. 6. <u>Good Governance and Civic Participation</u>: Yorkshire and Humber will possess and portray the highest standards of governance in all sectors and at all levels, and the highest levels of civic participation in decision-making and community life.
SECTORS THAT IMPACT ON GREENHOUSE GAS EMISSIONS	
Power Generation	Energy consumption is one of the indicators used to measure progress against the High Quality Environments objective.
Transport	<p>One of the frameworks objectives is 'Excellent Infrastructure'. This involves sound investment, management, and planning to deliver excellent infrastructure – including water services, energy, information and communications technology, the built environment, and transport. The objective also involves selection of development locations which reduce the need to travel.</p> <p>Traffic Congestion and Transport Use are two of the indicators used to measure this objective.</p>
Domestic	Housing Completions and Housing Affordability are two indicators used to measure progress against the Excellent Infrastructure objective.
Industry	Objective to have excellent ICT infrastructure and sustainable economy.

Strategy Title	Advancing Together: A Revised Strategic Framework For Yorkshire and Humber (Final Consultation Draft)
Agriculture	Rural Economy is one of the indicators used to measure progress against the Advanced Economy objective.
Commerce	<p>Advanced Economy is a core objective of Advancing Together. It focuses on wealth creation and business success, framed within the wider aims of sustainable development.</p> <p>Progress in achieving this objective is measured using indicators such as economic growth, productivity, enterprise, innovation, investment and employment.</p> <p>The framework also guides development to bring about renaissance of the Regions urban and rural areas and improve the appropriate use of land. This is advocated in the Excellent Infrastructure objective.</p> <p>Advancing Together recognises the future prosperity of Yorkshire and Humber is closely linked to the skills and aspirations of people in the region.</p> <p>First Class Quality Of Life involves enabling high quality and accessible services that will enable people to enjoy and value their work and leisure. Progress in achieving this objective will be measured using indicators such as Urban Renaissance, access to services and community well-being.</p>
AREAS OF POTENTIAL ADAPTATION	
Sea Level Rise	No direct reference
Flooding	No direct reference
Water Resources	Objective to deliver excellent water services infrastructure.
Agriculture	Rural Economy is one of the indicators used to measure progress against the Advanced Economy objective.
Habitat, Biodiversity & Landscape	<p>The objective 'High Quality Environments' involves delivering high quality environments in Yorkshire and Humber by protecting and enhancing the Regions rich and varied environmental assets. To do this the framework plans to use resources wisely and efficiently, minimise pollution, and protect biodiversity. It also focuses urgent attention to tackle the causes and impacts of climate change, reduce waste and manage it sustainably, and safeguard threatened wildlife.</p> <p>Progress in achieving this objective will be measured using indicators in six areas. These are:</p> <ul style="list-style-type: none"> • Air Quality • Water Quality • Biodiversity • Waste • Emissions
Buildings and Construction	No direct reference
Industry	Objective to have excellent ICT infrastructure and sustainable economy
Transport	One of the frameworks objectives is 'Excellent Infrastructure'. This involves

Strategy Title	Advancing Together: A Revised Strategic Framework For Yorkshire and Humber (Final Consultation Draft)
	<p>sound investment, management, and planning to deliver excellent infrastructure – including water services, energy, information and communications technology, the built environment, and transport. The objective also involves selection of development locations which reduce the need to travel.</p> <p>Traffic Congestion and Transport Use are two of the indicators used to measure this objective.</p>
How does this strategy contribute to the long term reduction of greenhouse gas Emissions?	<p>Advancing Together sets out a Regional vision and series of overarching Regional objectives, but looks to other regional strategies to collectively deliver this vision and meet the objectives.</p> <p>Progress in the Region is the monitoring document which reports on annual progress towards achieving the objectives set out in Advancing Together, it therefore helps to highlight the direction of change.</p> <p>The way in which this document contributes towards the long term reduction of greenhouse gas emissions and delivery of adaptation actions is through the objectives it sets and the clarity of these objectives, which other strategies strive to meet.</p>
How does this strategy contribute to the delivery of adaptation actions?	<p>The way in which this document contributes towards the delivery of adaptation actions is through the objectives it sets and the clarity of these objectives, which other strategies strive to meet.</p>

C1.2 Regional Sustainable Development Framework

Strategy Title	Building The Benefits: Yorkshire and Humber Regional Sustainable Development Framework (RSDF) 2003 - 2005
Originator	Yorkshire and Humber Assembly
Published Date	July 2003
Target Area	Yorkshire and Humber Region
Statutory or Non Statutory?	<p>The Government requires that Regional Sustainable Development Frameworks should be drawn up in every English region and that they should set out the sustainable development context for all other regional strategies. The Government White Paper on the development of regional governance, Your Region, 'Your Choice - Revitalising the English Regions' specifically mentions the key role of regional sustainable development frameworks to underpin this process and join up other regional strategies.</p> <p>Therefore, the production of the sustainable development framework is required under a statutory basis; however agencies are not statutorily obliged to adhere with the content of the framework (with the exception of the Regional Planning Board who produce the RSS).</p>
How the Strategy is Prepared?	<p>The Regional Chamber's Sustainability Commission developed the original RSDF on behalf of the Regional Chamber for Yorkshire and Humber. The Regional Chamber adopted the RSDF on 16th November 2000. Since then the Regional Chamber has reorganised to become the Yorkshire and Humber Assembly (YHA).</p> <p>The Assembly, alongside the Sustainability Commission, is now responsible for the development and implementation of the RSDF. The Sustainability Commission has a specific remit to co-ordinate the development and delivery of the RSDF and ensures that sustainability is integrated into the work of the other commissions.</p> <p>A full review of the RSDF is due for 2005 under new government guidelines on sustainable development. This will take place through IRF development.</p>
Decision Making Processes	<p>The RSDF sets out the aims for sustainable development so that they can be integrated with other regional and local strategies, a combined focus that is designed to ensure a consistent approach.</p> <p>An appraisal tool has been developed, based on the 15 aims of the RSDF. This is a tool to make sure that sustainability and in particular, this region's vision for sustainability, is embedded within all strategies and action plans. The RSDF also has an action plan to promote increased understanding of sustainable development and encourage policy and decision-makers across the region to make it central to their work. The Yorkshire and Humber Assembly, through the Sustainability Commission leads the development, delivery and monitoring of the 15 aims in the RSDF.</p>
Purpose and Aims of the Strategy	<p>This is an interim revised version of the RSDF for the period 2003-2005. Its purpose is to renew and re-focus efforts to promote sustainability and its integration into policy and decision-making across the region and take account of the developing nature of RSDF.</p> <p>The framework concentrates on two priorities - integrating sustainability into policy and decision making and developing a regional approach to tackling climate change.</p>

Strategy Title	Building The Benefits: Yorkshire and Humber Regional Sustainable Development Framework (RSDF) 2003 - 2005
	<p>The Regional Sustainable Development Framework (RSDF) is the mechanism to realise the Yorkshire and Humber vision for a sustainable region expressed in Advancing Together. The RSDF seeks to ensure that sustainable development is an integral part of policy and decision-making at regional, sub-regional and local levels throughout Yorkshire and Humber. Sustainable development depends upon simultaneously achieving the following four aims in an integrated way:</p> <ul style="list-style-type: none"> • Social progress that meets the needs of everyone • Effective protection and enhancement of the environment • Maintenance of high and stable levels of economic growth and employment • Prudent use of natural resources. <p>These are the national objectives for sustainable development and they have been translated into 15 aims for this region. Pursued together, they will improve the sustainability of Yorkshire and Humber and take the region closer to the vision in Advancing Together. The framework action plan applies the 15 aims in conjunction with the 4 cross-cutting themes which are:</p> <ul style="list-style-type: none"> • Social inclusion and equity across all sectors • A partnership and participative approach • Geographic adaptation to meet the needs of rural and urban communities • Creativity, innovation and appropriate use of technology
SECTORS THAT IMPACT ON GREENHOUSE GAS EMISSIONS	
Power Generation	<p>In terms of power generation the aims and actions are:</p> <ul style="list-style-type: none"> • Minimal pollution levels • Minimal greenhouse gas emissions and a managed response to the effects of climate change • Prudent and efficient use of energy and natural resources with minimal production of waste • Improved energy efficiency and insulation in housing to reduce fuel poverty and ill-health • Reduction of greenhouse gas emissions from domestic, commercial and industrial sources • Increased energy efficiency in all sectors • Increased amount of energy from renewable sources that is generated and consumed in the region • Increased efficiency in water, energy and raw material use • Developed renewable energy/resources
Transport	Actions for transport relate to:

Strategy Title	Building The Benefits: Yorkshire and Humber Regional Sustainable Development Framework (RSDF) 2003 - 2005
	<ul style="list-style-type: none"> • Provision a transport network maximising access whilst minimising detrimental impacts; • Ensure employment opportunities are accessible by public transport; • Reduce causes of accidents (including measures to reduce road accidents such as speed restrictions and traffic calming); • Ensure that essential services (e.g. health services and shops) and resources to serve communities are within reasonable non-car based travelling distance; • Ensure new developments provide essential services accessible without use of a car and are accessible by public transport; and • Reduce greenhouse gas emissions from transport. <p>One of the 15 aims of the RSDF is to enable a transport network which maximises access whilst minimising detrimental impacts. The RSDF proposes this can be achieved by:</p> <ul style="list-style-type: none"> • Reducing the need to travel by increasing access to key resources and services by means other than the car (e.g. by improving public transport) • Providing/improving/promoting information about alternatives to car-based transport • Supporting less use as well as more efficient use of cars (e.g. car sharing) • Improving access to opportunities and facilities for all groups • Making the transport/environment attractive to non-car users (e.g. pedestrians and cyclists) • Improving the environmental performance of vehicles • Encouraging freight transfer from road to rail and water • Encouraging employers to develop green travel plans for staff travel to/from work and at work.
Domestic	<p>The RSDF proposes the following aims and actions:</p> <ul style="list-style-type: none"> • To make quality housing available to everyone <ul style="list-style-type: none"> ○ Make housing available to people in need (taking into account requirements of location, size, type and affordability) ○ Enable people to obtain and maintain tenancies ○ Improve the quality of housing stock (increase safety and security, reduce unfit housing, improve accessibility for people with disabilities) ○ Reduce the number of empty and difficult to let properties • To enable conditions and services to engender good health <ul style="list-style-type: none"> ○ Improve equitable access to health service (pay particular attention to groups of people most excluded and in highest need)

Strategy Title	Building The Benefits: Yorkshire and Humber Regional Sustainable Development Framework (RSDF) 2003 - 2005
	<ul style="list-style-type: none"> ○ Improve the quality and integration of health services ○ Promote positive health and prevent ill-health ○ Address health inequalities (address the gap between those with worst health and those with better health) ● To ensure safety and security for people and property <ul style="list-style-type: none"> ○ Reduce crime through design measures ○ Address the causes of crime and/or reduce crime through intervention ○ Prevent re-offending ○ Provide crime and safety advice ○ Reduce fear of crime ● To create vibrant communities to participate in decision making <ul style="list-style-type: none"> ○ Build social and community capital, capacity and confidence ○ Increase community participation in activities and/or in the democratic process ○ Where appropriate, devolve decision-making to communities ○ Support civic engagement ○ Encourage supportive personal and community networks ○ Improve and increase community facilities
Industry	There are no points relating directly to industry..
Agriculture	The RSDF aims to reduce methane emissions from agriculture, landfills and past and present mining activities.
Commerce	<p>The RSDF aims to achieve:</p> <ul style="list-style-type: none"> ● Good quality employment opportunities available to all ● Conditions enabling business success, economic growth and investment ● Education and training opportunities building the skills and capacities of the population ● Safety and security for people and property ● Conditions and services engendering good health ● Culture, leisure and recreation opportunities available to all ● Vibrant communities participating in decision making ● Local needs met locally ● A quality built environment and efficient land use patterns that make good use of derelict sites, minimise travel and promote balanced development ● Minimal pollution levels (If environmental impacts are a significant result of the activity, consider an environmental impact assessment) ● Prudent and efficient use of energy and natural resources with minimal production of waste. ●

Strategy Title	Building The Benefits: Yorkshire and Humber Regional Sustainable Development Framework (RSDF) 2003 - 2005
AREAS OF POTENTIAL ADAPTATION	
Sea Level Rise	No specific reference
Flooding	The RSDF seeks to prevent inappropriate development in flood plains and reduce risk from flooding.
Water Resources	The RSDF seeks to increase the use of sustainable urban drainage (which reduces run-off and improves water quality).
Agriculture	The RSDF aims to reduce methane emissions from agriculture, landfills and past and present mining activities.
Habitat, Biodiversity & Landscape	<p>The RSDF aims to establish a bio-diverse and attractive natural environment. This will be achieved by:</p> <ul style="list-style-type: none"> • Protecting and enhancing existing priority habitats and species and providing for appropriate long term management of wildlife habitats • Protecting and enhancing individual features such as hedgerows, drystone walls, ponds and trees • Increasing understanding of ways to create new environmental assets and restore wildlife habitats • Making use of opportunities wherever possible to enhance the environment as part of other initiatives • Increasing the quality and quantity of woodland cover in appropriate locations using native species • Protecting and enhancing the region’s rivers, estuary and coastal waters • Promoting, educating and raising awareness of the enjoyment and benefits of the natural environment and biodiversity and promoting access to wildlife on appropriate sites.
Buildings and Construction	The RSDF seeks to ensure new development is well designed and appropriate to its setting, support local distinctiveness and increase use of sustainable design and sustainable building materials in construction.
Industry	The aims and actions covered within power generation and commerce can also be applied to industry.
Transport	Aims to reduce methane emissions from agriculture, landfills and past and present mining activities.
How does this strategy contribute to the long term reduction of greenhouse gas emissions?	The RSDF proposes researching and monitoring the likely effects of climate change and provide evidence and advice on the predicted consequences for affected areas and sectors
How does this strategy contribute to the delivery of adaptation actions?	The RSDF proposes planning and implementing adaptation measures for the likely effects of climate change

C1.3 Draft Regional Spatial Strategy: The Yorkshire and Humber Plan

Strategy Title	Draft Regional Spatial Strategy The Yorkshire and Humber Plan: Draft for Public Consultation
Originator	Yorkshire and Humber Assembly
Published Date	December 2005
Target Area	Yorkshire and Humber Region
Statutory / Non-statutory document?	Part 1(3) of the Planning and Compulsory Purchase Act 2004 requires that the Regional Planning Body keep under review the draft RSS and matters which may be expected to affect (a) the development in its region or any part of the region and (b) the planning of that development. In addition, section 38 (3) of the Act states that the Regional Spatial Strategy is part of the development plan.
How the Strategy is Prepared?	<p>In its statutory role as the Regional Planning Body, the Yorkshire and Humber Assembly led the preparation of the draft RSS. The work involved all the local planning authorities in the Region and a wide range of stakeholders.</p> <p>The basis of the plan was 'Advancing Together', the agreed vision for the Region. This provides the framework for the draft RSS, Regional Economic Strategy and Regional Housing Strategy.</p> <p>A core evidence base has been used as the basis to develop the plan. The Regional Economic and Housing Strategies have provided shared evidence bases. The Sustainability Appraisal process also generated key evidence. Evidence has been drawn from Annual Monitoring Reports, Progress in the Region (which measures progress against Advancing Together indicators), the Information Baseline (used for the SEA) and the Regional Settlement Study (June 2004).</p> <p>The draft RSS has been subject to a combined Strategic Environmental Assessment and Sustainability Appraisal process through all stages of its preparation.</p> <p>In July 2004 the 'Draft Spatial Vision and Strategic Approach' consultation document was published, following this a second pre-draft consultation exercise was held in 2005 on a series of topic papers. This was followed by a third formal draft consultation which went to Examination in Public in autumn 2006.</p>
Decision Making Processes	<p>The draft RSS provides a spatial framework to inform preparation of Local Development Documents and Local Transport Plans; and regional and sub regional strategies and programmes that have a bearing on land use activities. It also guides investment plans and priorities of a range of agencies and infrastructure and service providers.</p> <p>The draft RSS is a statutory document that is regionally and sub-regionally specific and focuses on implementation. Local Development Frameworks should be in general conformity with the policies specified in the draft RSS; as a result Local Planning Authorities need to adhere with RSS policy when making decisions.</p> <p>RSS policy needs to be set within the context of national policy; therefore it should also align with national planning policy statements and guidance.</p> <p>In their role as the Regional Planning Body the Yorkshire and Humber Assembly are statutory consultees in the planning process. Their role is to</p>

Strategy Title	Draft Regional Spatial Strategy The Yorkshire and Humber Plan: Draft for Public Consultation
	ensure planning applications of regional and sub regional significance do not impinge on the implementation of the RSS.
Purpose and Aims of the Strategy	<p>The draft RSS sets out the scale, priorities and broad locations for change and development in the region over the period until 2021. It provides a framework for where development should be located and how much should take place. The draft RSS includes the Regional Transport Strategy and links with the broader issues of environment, sustainable development and quality of life.</p> <p>The draft RSS influences and is influenced by the economy, housing, transport and the built and natural environment. It provides a long term development strategy for the Region and seeks to help the Region become more competitive, meet its housing needs and address its environmental and transport pressures.</p> <p>The draft RSS seeks to 'achieve a more sustainable pattern and form of development, investment and activity in the Yorkshire and Humber Region – putting a greater emphasis on matching needs across the Region with opportunities and managing the environment as a key resource'.</p> <p>Policy YH2 in the Core Approach addresses Climate Change and Resource Use. Its sets the Regions target to reduce greenhouse gas emissions by at least 20% below 1990 levels by 2010 and 25% below 1990 levels by 2015.</p>
SECTORS THAT IMPACT ON GREENHOUSE GAS EMISSIONS	
Power Generation	<p>The draft RSS aims to increase energy efficiency and increase renewable energy capacity. Policy ENV5 states the Region will improve energy efficiency and increase installed renewable energy capacity to at least 708 MW by 2010 and 1862 MW by 2021. This includes maximising use of power sources such as passive solar heating and combined heat and power systems. The policy seeks to locate development to utilise community heating scheme opportunities near major sources of power generation, especially those at Immingham and near Selby. It also requires at least 10% of the energy to be used in sizeable new development to come from on-site renewable energy sources.</p> <p>In the Leeds City Region, policy LCR1 promotes using the opportunities provided by increased development in urban areas to maximise renewable energy generation and energy efficiency.</p> <p>In the South Yorkshire sub area, policy SY1 seeks to encourage planting for biomass in Doncaster, Barnsley and Rotherham.</p> <p>Policy HE1 (Humber Estuary) seeks to develop the sub areas renewable energy generation potential, whilst safeguarding character and amenity from the excessive culminative impacts of large numbers of wind turbines and associated development.</p> <p>The policy for Vale and Tees sub area includes investigating the scope for renewable energy generation and increasing biomass production both to supply the regional renewable energy needs and to promote agricultural diversification.</p> <p>The Coast policy intends to investigate scope for more renewable energy initiatives.</p>

Strategy Title	Draft Regional Spatial Strategy The Yorkshire and Humber Plan: Draft for Public Consultation
	Appropriate planting and management measures are encouraged in the Remoter Rural sub area to provide biomass for renewable energy.
Transport	<p>The draft RSS aims to reduce travel by both positive interventions (improved public transport) and demand restraint (promoting modal shift away from the car). It seeks to promote the movement of goods by water and rail and support increased use of its ports and waterways and improve surface access to them. It aims to improve access to services in rural areas by improving public transport provision and improve surface access to the regions airports by public transport.</p> <p>The approach taken in the draft RSS is to facilitate fewer and shorter journeys with less reliance on the car and increased opportunities for using public transport, cycling and walking.</p> <p>According to policy T1 transport authorities should make optimum use of the existing highway network to address congestion and encourage modal shift, with road space being actively managed to support movement by modes other than the private car. Positive management measures should include improvements in strategic and local public transport and incentives to use public transport at new housing developments. Policy T2 advocates the use of park and ride facilities coupled with increased use of public transport.</p> <p>In addition policy T3 states development should make use of existing public transport services or provide a focus for viable new services. Policy T3 also seeks to develop and improve interchanges to support a hierarchy of strategic public transport services. This includes interchanges in Leeds, Sheffield and Hull, supported by sub-regional interchanges at Bradford, Doncaster, Huddersfield, Northallerton, Selby, Wakefield and York.</p> <p>Policy T5 seeks to improve access to all main tourist destinations including National Parks, coastal resorts and urban centres by sustainable modes of transport. This includes developing and improving long distance cycling and walking routes.</p> <p>Policy T9 sets out the Regions transport priorities and where investment should be directed. It supports the transport investment and management priorities set out in the draft RSS (Table 16.24). This includes making the best use of existing infrastructure before recommending investment in new infrastructure; supporting a general presumption against increasing highway capacity except where it is a specific regional priority or essential localised improvement; and investing in new infrastructure based on a multimodal approach.</p> <p>Policy relating to Leeds City Region seeks to ensure strategic patterns of development maximise the opportunities to use non car modes of transport, improve surface access links to Manchester and Leeds/Bradford airports and reducing congestion on the Regions motorways.</p> <p>In South Yorkshire policy seeks to develop high quality public transport based on bus and tram networks and develop a sub area transport system that secures air quality improvement and reduces energy consumption.</p> <p>In Humber Estuary sub area one regionally significant investment priority involves improving multimodal land access to the Humber Ports and developing their complementary roles.</p> <p>Vale and Tees policy specifies encouraging shift from car based to public</p>

Strategy Title	Draft Regional Spatial Strategy The Yorkshire and Humber Plan: Draft for Public Consultation
	<p>transport based commuting.</p> <p>The Coast sub area policy looks to extend public transport access to coastal hinterlands and the North York Moors National Park as well as securing better links between settlements.</p> <p>Policy in the Remoter Rural sub area encourages innovative public transport initiatives – both road and rail and new cycling and walking facilities for residents and visitors to improve access to service centres and peripheral larger centres.</p> <p>Policy E1 recognises the role of ports and airports as significant economic drivers.</p>
Domestic	<p>The draft RSS aims to provide sufficient homes to house the additional households forecast across the Region, with 15,000 new homes a year until 2011, 16,000 a year from 2011 and 19,000 a year from 2016 to 2021. (Note: this figure is likely to change in the final version of the RSS).</p> <p>It aims to ensure that new house building is managed in a way that supports the restructuring of housing markets in areas where there is low demand and increases the amount of affordable housing across the Region, particularly in areas of high need.</p> <p>Humber Estuary sub area policy, HE1, seeks to review current stock of housing and employment areas in Hull, Scunthorpe and Grimsby as a basis for wide ranging urban regeneration.</p> <p>Within the Vale and Tees sub area policy seeks to restrain market housing development overall in the sub area to support regeneration and growth in the Leeds and Tees Valley City Regions and reduce long distance commuting.</p> <p>Within the Remoter Rural sub area policy seeks to increase restraint on new market housing to safeguard local character and support regeneration character.</p>
Industry	<p>The draft RSS approach includes diversifying urban and rural economies to help retain, attract and create more and better jobs in the Region.</p> <p>In the South Yorkshire sub area policy seeks to minimise development likely to exacerbate air quality in the A1/M1 corridor.</p> <p>Policy E1 promotes the opportunities for business relating to the Regions environmental assets and challenges including sustainable construction, renewable energy, resource and waste efficiency, environmental technologies and the low carbon economy.</p> <p>According to policy ENV14 waste management facilities should be prioritised firstly at established and proposed industrial sites which have potential for the location of waste management facilities and the co-location of complementary activities such as resource recovery or sustainable growth parks.</p> <p>At a sub regional level:</p> <ul style="list-style-type: none"> • Policy LCR1 (Leeds City Region) seeks to develop complementary conference roles for Harrogate and Leeds; • Within the South Yorkshire sub area policy SY1 supports advanced manufacturing related development at the Waverley/Orgeave Advanced Manufacturing Park; • Policy HE1 seeks to enhance the tourism offer and safeguard the Port

Strategy Title	Draft Regional Spatial Strategy The Yorkshire and Humber Plan: Draft for Public Consultation
	<p>Logistics / Humber Bank site;</p> <ul style="list-style-type: none"> • Within York the draft RSS seeks to encourage the business and financial services sector, knowledge industries (through supporting Science City and safeguarding the Spallation project site at Burn Airfield, Selby), leisure and retail, and develop the tourism sector; and • Within the Remoter Rural sub area policy RR1 seeks to encourage creative, diverse and low impact enterprises.
Agriculture	<p>The draft RSS aims to protect and increase woodland areas, support the appropriate use of agricultural land and safeguard mineral deposits.</p> <p>Policy ENV6 states the Region will increase woodland area by approx 500HA p.a to 2021. This includes increased planting in urban areas, especially on previously developed land and on land by motorways and railways. The policy also seeks to avoid large scale coniferous forestry projects on the Sherwood Sandstone aquifer.</p> <p>Policy ENV7 seeks to locate development on poorer quality agricultural land where is for non-agricultural use. Development on agricultural and will need to facilitate renewable energy (especially biomass for co-firing in power stations in the Selby area), tourism, creation of woodland, positive land management for flood alleviation and increased water storage capacity on farms, wildlife habitat creation schemes , recreation projects, local produce for sale and local waste management schemes.</p> <p>The South Yorkshire sub area policy SY1 intends to develop and enhance woodland planting in line with South Yorkshire Forest Plan.</p> <p>In the Vale and Tees sub area policy intends to lessen the dependency on the agricultural sector by diversifying the economy and reducing out-commuting. Agricultural diversification is also promoted through the policy on increasing biomass energy production.</p>
Commerce	<p>The draft RSS aims to strengthen the role of existing city and town centres as a key focus of commercial activity. It will review the supply of land for business so that sufficient land is provided and safeguarded to meet the needs of a modern economy and supports the growth of priority economic sectors and clusters. It also aims to promote the role and development of tourism in the Region and support the diversification and strengthening of the rural economy.</p> <p>The overall approach includes focusing development in urban areas and improving accessibility to housing, employment, shopping, cultural, health, education and leisure facilities and services.</p> <p>The growth areas in the Leeds City Region are Airedale (north of Bradford), Bradford and Leeds, the Coalfield regeneration area, Aire Valley (south of Leeds and east Leeds) and South Dewsbury. In South Yorkshire focus for regeneration is in the former coalfield settlements in the Dearne Valley, Sheffield and the Sub Regional Centres (Rotherham, Barnsley and Doncaster).</p> <p>In the east of the Region the focus for renaissance in the Humber Estuary sub area is in Hull, Grimsby and Scunthorpe. In York sub area, draft policy focuses the majority of development on the City of York and significant</p>

Strategy Title	Draft Regional Spatial Strategy The Yorkshire and Humber Plan: Draft for Public Consultation
	development in Selby. The Coast sub region focuses on the majority of growth on Scarborough.
AREAS OF POTENTIAL ADAPTATION	
Sea Level Rise	<p>Within the Humber Estuary draft RSS policy seeks to safeguard the sub areas main economic assets and settlements from tidal and fluvial flooding.</p> <p>The Coast sub area policy (C1) seeks to avoid the risk from flooding, erosion and landslip along the coast, including through roll-back approaches to relocate existing uses.</p>
Flooding	<p>The draft RSS aims to avoid development in high flood risk areas. The low lying eastern areas which make up the York sub area and Selby are at risk from flooding. This is also the case for urban centres in the Pennine Fringe area including Aire Valley to Leeds and Bradford and main urban areas in Calderdale. Information supporting the draft RSS identifies the need for increased flood alleviation measures such as safeguarding washlands and increasing tree planting along the whole course of river systems.</p> <p>The draft RSS Floods and Flood Risk policy (ENV1) states development in high flood risk areas will be avoided, where possible and flood management will be undertaken proactively. Allocation of areas for development will take place in line with strategic flood risk assessments.</p> <p>ENV1 states flood management will be required to facilitate development of Leeds, Bradford, Sheffield, Hull and York, the coastal towns, inland urban areas where there is little land outside high flood risk zones and land on the south bank of the Humber. In addition it should protect parts of the strategic transport network, provide flood storage, habitat creation and managed realignment in areas around the Humber, and river corridors especially in Bradford and Kirklees. Finally flood management should provide positive land management for flood alleviation in the upland areas of the Yorkshire Dales, the North York Moors, the Howardian Hills and the Pennines.</p> <p>Policy SY1 (South Yorkshire sub area) seeks to adapt to climate change by alleviating flood risk, particularly in the upland areas of the South Pennines.</p> <p>The flooding from the Humber and associated river and drainage systems to the main urban areas and other settlements needs to be managed and risk of flooding minimised. This forms part of policy HE1 significant investment priorities.</p> <p>In the York sub area, policy Y1 seeks to help mitigate flooding through proactive planning and management and provide appropriate protection, especially in York and Selby.</p> <p>The Vale and Tees sub area policy seeks to reduce the risk of flooding in settlements adjacent to the sub areas rivers and control development in 'at risk' areas.</p> <p>Appropriate planting and management measures are encouraged in the Remoter Rural sub area to ameliorate downstream flood risk.</p>
Water Resources	Draft RSS policy ENV2 seeks to safeguard water resources and encourage water efficiency. This includes ensuring adequate water resource capacity and providing reliable and efficient supply of drinking water to settlements,

Strategy Title	Draft Regional Spatial Strategy The Yorkshire and Humber Plan: Draft for Public Consultation
	<p>especially in East Yorkshire and the remoter rural parts of North Yorkshire. It also means maximising water efficiency measures, and in particular minimising development that consumes large quantities of water at the Sherwood Sandstone aquifer in Selby, Doncaster and North Lincolnshire. The Region will also maintain high standards of water quality as per policy ENV3.</p>
Agriculture	<p>The draft RSS aims to protect and increase woodland areas, support the appropriate use of agricultural land and safeguard mineral deposits.</p> <p>Policy ENV6 states the Region will increase woodland area by approx 500HA p.a to 2021. This includes increased planting in urban areas, especially on previously developed land and on land by motorways and railways. The policy also seeks to avoid large scale coniferous forestry projects on the Sherwood Sandstone aquifer.</p> <p>Policy ENV7 seeks to locate development on poorer quality agricultural land where is for non-agricultural use. Development on agricultural and will need to facilitate renewable energy (especially biomass for co-firing in power stations in the Selby area), tourism, creation of woodland, positive land management for flood alleviation and increased water storage capacity on farms, wildlife habitat creation schemes , recreation projects, local produce for sale and local waste management schemes.</p> <p>The South Yorkshire sub area policy SY1 intends to develop and enhance woodland planting in line with South Yorkshire Forest Plan.</p> <p>In the Vale and Tees sub area policy intends to lessen the dependency on the agricultural sector by diversifying the economy and reducing out-commuting. Agricultural diversification is also promoted through the policy on increasing biomass energy production.</p>
Habitat, Biodiversity & Landscape	<p>The draft RSS aims to safeguard and enhance biodiversity, geological heritage, the historic environment and distinctive landscapes. The approach taken includes raising environmental quality, increasing biodiversity and enhancing natural and built heritage assets.</p> <p>According to policy ENV8 the Region will maintain and restore natural processes, especially sediment flow on the Holderness coast and in the Humber Estuary. It will protect geological features, support the recovery of priority species, restore and enhance priority habitats and functional networks of biodiversity in the floodplains, peat lands, and saline lagoons of the Humber, calcareous grasslands, heaths and bogs, limestone pavements and meadows especially in North, South and East Yorkshire and will encourage networks of urban greenspace and ecological corridors in line with the Regions habitat enhancement map.</p> <p>In order to adapt to climate change, policy SY1 ensures compensatory sites for biodiversity and species migration, especially in the South Pennines and increasing and enhancing urban planting, green space and biodiversity networks in Sheffield, Rotherham, Barnsley and Doncaster. The draft RSS also advocates protection and enhancement of the biodiversity and landscape character of the Southern Pennine Fringe, Humberhead Levels, South Magnesian Limestone and Coalfield landscape character areas.</p> <p>Policy HE1 (Humber Estuary) seeks to protect and enhance the biodiversity and landscape character of the Humber Estuary and Wolds area.</p> <p>In the York sub area the objective is to protect and enhance the nationally</p>

Strategy Title	Draft Regional Spatial Strategy The Yorkshire and Humber Plan: Draft for Public Consultation
	<p>significant historical and environmental character of York, and safeguard and enhance biodiversity, landscape character and environmental quality in the York sub area including the Vales, Humberhead Levels, the Derwent Valley, the Wolds and Howardian Hills AONB.</p> <p>Vale and Tees (VTL1) policy seeks to safeguard and improve the landscape character of the Vale of Mowbray and Tees Lowlands.</p> <p>The Coast sub area specifies protecting the character, heritage and biodiversity of the undeveloped coast and coastal waters and investigates extending Heritage Coast designation between Scarborough and Flamborough Head.</p> <p>Remoter Rural sub area seeks to protect the character, heritage and biodiversity of the upland natural environment, including the Yorkshire Dales and North York Moors National Parks, the Howardian Hills, Nidderdale and the Forest of Bowland AONBs.</p> <p>According to policy ENV10 development strategies will maintain and enhance historic, derelict and despoiled urban fringe, degraded rural and coastal landscapes. It will also manage walking, cycling and horse trails and the corridors of the national trails (e.g. Pennine Way).</p>
Buildings and Construction	The draft RSS advocates building on previously developed land and seeks to provide a mix of housing stock as stated in policy H4.
Industry	See section on industry above.
Transport	<p>Policy T4 states the Region will develop an integrated freight distribution system that makes effective use of all modes of transport. It seeks to maximise the use of rail or water for freight movements from new developments.</p> <p>This policy intends to locate developments with high levels of freight and commercial traffic close to intermodal freight facilities and intermodal interchanges around the Humber sub region, Selby and Doncaster and along the Aire and Calder navigation. It seeks to enable a more efficient and sustainable approach to deliveries including reducing freight movements by surface modes of transport and encouraging Freight Quality Partnerships between Local Authorities.</p> <p>In Humber Estuary sub area policy HE1 looks to maximise opportunities around the port and improve opportunities for inter-modal transfer from road to rail or water.</p> <p>The York sub area policy seeks to increase the freight capacity of the Trans Pennine rail network.</p>
How does this strategy contribute to the long term reduction of GHG Emissions?	<p>Policy YH2: Climate Change and Resource Use states all plans, strategies, investment decisions and programmes in the Region should:</p> <p>Help to meet the Regions target to reduce greenhouse gas emissions by at least 20% below 1990 levels by 2010 and 25% below 1990 levels by 2015 by:</p> <ul style="list-style-type: none"> • Increasing urban density • Encouraging better built homes and energy efficiency • Reducing traffic growth and promoting competitive alternatives to the car

Strategy Title	Draft Regional Spatial Strategy The Yorkshire and Humber Plan: Draft for Public Consultation
	<ul style="list-style-type: none"> • Promoting walking, cycling and use of public transport • Minimising resource demands from development • Encouraging redevelopment on previously developed land • Facilitating effective waste management • Increasing renewable energy capacity and carbon capture
How does this strategy contribute to the delivery of adaptation actions?	<p>Policy YH2 seeks to:</p> <ul style="list-style-type: none"> • Plan for successful adaptation to the predicted impacts of climate change by: • Minimising threats from and impact of coastal erosion, increased flood risk, increased storminess, habitat disturbance, increased pressure on water resources supply and drainage systems • Maximising opportunities from: increased growing season; greater tourism potential; and warmer urban environments.

C1.4 Yorkshire and Humber Regional Economic Strategy 2006

Strategy Title	Yorkshire and Humber Regional Economic Strategy (RES) 2006 - 2015
Client/Originator	Yorkshire Forward (Regional Development Agency)
Published Date	2006
Target Area	Yorkshire and Humber Region
Statutory or Non-Statutory Document?	Yorkshire Forward has statutory responsibility to produce this Strategy with and on behalf of the region. The RES is a non-statutory document that provides a road map detailing economic growth in Yorkshire and Humber to 2015.
How the is Strategy Prepared?	<p>Yorkshire Forward led the preparation and is accountable for the RES. It was completed in conjunction with Yorkshire and Humber Assembly and the Government Office of Yorkshire and Humber. The vision for the RES is based on the agreed vision for the Region; 'Advancing Together'. The strategy also uses clear evidence showing reasons for the vision and actions the Region are taking. The evidence is detailed in the RES Companion Document and the 'Progress in the Region' document.</p> <p>The RES is the product of work and ideas of more than 5,000 people and businesses brought together by Yorkshire Forward. The RDA consulted over 25,000 businesses and organisations.</p> <p>The strategy seeks to engage with and benefit citizens and businesses wherever relevant and possible. Good examples include involving businesses in the steering groups that run regional 'clusters' and other initiatives. People will be involved through taking part in the 'Town Teams' that guide urban and rural renaissance, a community led approach to regeneration, and through an emphasis on skills, education, culture and citizenship.</p> <p>The RES also considers the wider policy framework at a regional and pan regional level. It is in line with the region's overall 'Advancing Together' framework that links together all the key regional plans. It addresses linkages with regional strategies such as the RSS and Housing Strategy as well as looking at how it fits into the Northern Way Initiative. In this way the strategy supports co-operation with other regions including those that share borders with Yorkshire and Humber.</p> <p>The strategy also links into the national policy context. It fully supports the goal of sustainable development with decisions being taken in the context of the five principles in the UK sustainable development strategy – living within environmental limits; a strong, healthy and just society; a sustainable economy; good governance; and using sound science responsibly.</p>
Decision Making Processes	<p>The RES is owned by the whole region and is delivered by a wide ranging partnership combining business, democratic and other community leaders. Delivery is focused on the four sub regions of West Yorkshire, South Yorkshire, North Yorkshire and the Humber.</p> <p>Other key partnership groupings that play an important role in leading on specific policy areas in the RES are Yorkshire Science – the Science and Innovation Council, the Regional Skills Partnership, the Regional Housing Board, European Strategy Board, the Learning and Skills Council and the Regional Transport Board.</p> <p>Investment Planning is the route by which the RES will be delivered. Because</p>

Strategy Title	Yorkshire and Humber Regional Economic Strategy (RES) 2006 - 2015
	<p>the region is diverse in both its people and geography, different places have different circumstances and priorities. The Strategy avoids a 'one size fits all' approach. Investment Planning allows for the RES to be delivered through local areas and crafted to the needs of each area.</p>
<p>Purpose and Aims of the Strategy</p>	<p>The RES economic vision is to be 'a great place to live, work and do business that fully benefits from a prosperous and sustainable economy'. To achieve the vision Yorkshire Forward has three aims that the region must deliver together.</p> <p>The three aims, detailed below are the basis around which the whole approach in the strategy is structured. These are:</p> <ul style="list-style-type: none"> • Enhancing and realising the potential of all Yorkshire and Humber's people to achieve a healthy learning region and social inclusion; • Growing existing and new businesses to achieve sustainable economic growth and jobs; and • Utilising the full potential of Yorkshire and Humber's physical and cultural assets, maximising resource efficiency and conserving and enhancing its environment to achieve an integrated, sustainable economy. <p>Together these three aims are designed to achieve sustainable development. This means taking a long-term approach that develops Yorkshire and Humber's economy in ways that improve business success and quality of life whilst protecting and enhancing the environment.</p> <p>Six Objectives translate these aims into action on the ground. The central principle of quality and pride of place binds them together, and the themes of sustainable development, diversity and leadership and ambition underpin the way they are delivered. The six objectives are:</p> <ol style="list-style-type: none"> 1. More business 2. Competitive business 3. Skilled people 4. Good jobs 5. Transport, infrastructure and environment 6. Stronger cities, towns and rural areas <p>The RES recognises the importance of sustainable development and the impact of climate change. Its aims and objectives centre on securing long term improvement to the economy and quality of life of all the region's people without eroding the environment.</p> <p>The strategy states 'It is because of its massive impact on businesses, the environment and people's wellbeing and futures that a strong economy is so important. The magnitude and increasingly obvious impact of climate change means that the region must take robust action wherever we can to tackle its causes and prepare our businesses to compete in a 'low carbon economy' with less reliance on fossil fuels. Achieving this will demand unprecedented attention, innovative approaches and taking sometimes tough, but far sighted decisions on development patterns and priorities.</p> <p>The RES provides practical action and support to business to reduce greenhouse gas emissions through efficiency measures, reduced travel and modal shift, and to implement adaptation measures and highlights the economic benefits of acting now, e.g. energy, resource and cost savings as</p>

Strategy Title	Yorkshire and Humber Regional Economic Strategy (RES) 2006 - 2015
	well as market advantages.
SECTORS THAT IMPACT ON GREENHOUSE GAS EMISSIONS	
Power Generation	<p>Security of resource and energy supplies is an increasing concern, probably leading to generation of more energy locally and to more efficient use of resources. Increased demand for fossil fuels such as oil coupled with finite resources will inevitably lead to higher prices. Transport systems and businesses that have lower dependency on fossil fuels will be sheltered from some of the economic impact and may gain competitive advantages.</p> <p>Through the RES, Yorkshire Forward intend to:</p> <ul style="list-style-type: none"> • Grow businesses through an approach that is sensitive to the environment e.g. through promoting resource efficiency; • Promote the transition to a low carbon economy through highly efficient use of energy and resources in businesses • Work to make the region less reliant on fossil fuels – promoting a ‘low carbon economy’ - will be the norm not the exception. On average, businesses can save 10-20% of utility costs through simple energy management and low cost measures. <p>The RES seeks to ensure effective energy, utilities and broadband investment include work that enhances ‘energy security’ and utilises ‘embedded energy’, including solutions based on more localised generation, storage and distribution.</p> <p>As a major producer of energy for the nation, regional agencies will work with the energy industry in Yorkshire and Humber to ensure its long term success is twinned with action to bolster energy security, efficiency and to reduce greenhouse gas emissions – for instance more renewable energy and higher rates of biomass co-firing in power stations.</p>
Transport	<p>The RES supports the Regional Transport Strategy (RTS) and the Freight Strategy.</p> <p>It seeks to ensure better North-South links to London and the North East and more capacity on faster and more reliable Transpennine rail services between Leeds, Manchester and Sheffield which will better link the North’s major city regions.</p> <p>Improving capacity on the M62 will not happen quickly, and extra lanes would become clogged without measures to manage demand, such as road pricing or a joint car share/bus lane. Yorkshire Forward will discuss with Government how including such measures can bring forward improvements to the M62 and create new revenue streams to support other transport investment in the region. Quality bus frameworks and services in city regions are also vital as is light rail in the Leeds and Sheffield city regions.</p> <p>The strategy encourages walking and cycling solutions at the local level to help reduce congestion, assist urban quality and safety, and promote health.</p> <p>It recognises air services are important for the region but are an increasing contributor to climate change. Proposals on airports focus on public transport access to airports which assists environmental and economic goals. Access improvements will be prioritised according to the numbers using the airports and regional importance. The Region will consider how it can work with the</p>

Strategy Title	Yorkshire and Humber Regional Economic Strategy (RES) 2006 - 2015
	<p>aviation industry to reduce emissions and environmental impacts</p> <p>The RES identifies priority transport improvements that should be implemented as they are vital for economic success. Yorkshire Forward will:</p> <ul style="list-style-type: none"> • Improve access to Hull and the Humber ports, airports and the Leeds and Sheffield city regions; • Secure progress on long term transport priorities such as better rail links to London and Manchester by the North; • Expand services at Leeds/Bradford and Robin Hood airports. However, public transport to both airports (and to Humberside airport) will need to be improved. <p>The strategy supports the approach to prioritise public transport improvements, to locate new development in places that are readily accessible by good public transport, and to sensitively manage growing demand for car travel on key routes.</p> <p>The RES also intends to focus on innovative action, such as on ‘soft measures’ including ICT solutions that help people to avoid the need to travel by car. Other soft measures cited by the RES include workplace and school travel plans, travel awareness campaigns to promote alternatives to the car, car sharing and teleworking which can have a notable impact.</p>
Domestic	<p>The RES feels projects such as the Golden Triangle Partnership between North and West Yorkshire will need to be strongly connected to the renaissance agenda, to forge an integrated response to issues of housing affordability. It states pilot schemes will examine routes for improving delivery of affordable housing in the region’s market towns; and establish the link between economic growth and housing provision. Other initiatives include Osbaldwick in York, Holme Lane in Selby and Abbeyfields Esk Moor in Scarborough district.</p>
Industry	<p>The strategy aims to</p> <ul style="list-style-type: none"> • Make the most of priority clusters such as advanced engineering and metals and digital industries and key sectors such as financial services and tourism; • Foster innovation to develop new markets and products– including good links between business and Higher Education Institutions to exploit the region’s science and research base (eg. York’s Science City). This is especially the case for businesses working in the fields of manufacturing and technology; • Boost key sectors of Regional significance such as Tourism, Financial & Business Services, Logistics and Construction; and • Grow business and employment in knowledge based Regional clusters. <p>The RES focuses development and growth of the following clusters:</p> <ul style="list-style-type: none"> • Digital Industries; • Advanced Engineering and Metals; • Chemicals;

Strategy Title	Yorkshire and Humber Regional Economic Strategy (RES) 2006 - 2015
	<ul style="list-style-type: none"> • Bioscience; • Food and Drink; • Healthcare Technologies; and • Environmental Technologies.
Agriculture	<p>The RES aims to secure a strong and diverse rural economy with special focus on supporting sustainable approaches to farming, tourism and land management; to assist the economy in these places and secure a long term future.</p> <p>The strategy explores other avenues to diversify the rural economy such as IT based SMEs.</p> <p>It also recognises that reform of the Common Agricultural Policy is having profound impacts on agriculture. This includes offering big opportunities to farmers focusing on food quality, biomass and bio fuels, and environmental stewardship. It also however has impacts on hill farming with implications for farmers, biodiversity and landscapes.</p> <p>Yorkshire Forward’s rural renaissance agenda will link to action on the Food and Drink cluster which will fully incorporate agricultural aspects and link local growers to regional markets, food processors and distributors.</p> <p>The RES recognises the opportunity to create new jobs and economic growth in areas like waste minimisation and recycling, forestry, energy crops and organic farming. Doing so will address the need to promote ‘sustainable production and consumption’ that is identified regionally as well as nationally and link with the national ‘Business Resource Efficiency and Waste’ programme. Much of the land based activity will be focused in rural areas and the coast.</p>
Commerce	<p>The RES aims to deliver high quality physical development that supports urban and rural renaissance, helps the Regions environmental goals, builds on the distinctive assets of the Regions cities and towns and chooses locations that uses land wisely including brownfield sites where possible.</p> <p>The RES objectives are to:</p> <ul style="list-style-type: none"> • Help businesses to win and expand markets through supply chains. Trade and procurement connections will be made between procurement that supports regional supply chains and employment and environmental aims; • Use Local Area Agreements to target resources and improve performance in the most deprived areas; • Boost the role of City Regions as economic drivers; and • Deliver Integrated Renaissance Programmes in major cities and towns that bring together business, people, and physical aspects as well as issues including culture, housing, health, crime and tourism. <p>The urban renaissance programme covers Barnsley, Bradford, Bridlington, Doncaster, Greater Grimsby, Halifax, Huddersfield, Hull, Leeds, Rotherham, Scarborough, Scunthorpe, Selby District, Sheffield, York, Wakefield, and the Five Towns. All programmes adopt a high quality and sustainable approach that seeks transformation across a place, with emphasis on local assets,</p>

Strategy Title	Yorkshire and Humber Regional Economic Strategy (RES) 2006 - 2015
	<p>culture and distinctiveness. Good design of buildings and townscapes is central to implementation.</p> <p>The RES proposes action to secure revival, regenerate and improve environmental quality in areas like Holbeck Urban Village; the Leeds Waterfront, the Aire Valley, Bradford, areas of Manningham, including Lister's Mill, and Airedale.</p> <p>North Yorkshire's renaissance activity has a strong focus on its market towns, reflecting the rural nature of much of the subregion. Renaissance activity in South Yorkshire is taking place in Barnsley, Doncaster and Rotherham and Sheffield city centre is being transformed through the work of its Urban Regeneration Company and Masterplan. As the region's main ports logistics centre, regeneration in the Humber subregion is focused on Hull and the major assets of the Humber Ports, including the ports of Immingham, Hull, Grimsby and Goole as well as large centres like Scunthorpe.</p>
AREAS OF POTENTIAL ADAPTATION	
Sea Level Rise	No direct reference
Flooding	No direct policy reference
Water Resources	The RES states measures will be taken to adapt to other climate change impacts such as increased pressure on the region's water resources.
Agriculture	<p>The RES aims to secure a strong and diverse rural economy with special focus on supporting sustainable approaches to farming, tourism and land management; to assist the economy in these places and secure a long term future.</p> <p>The strategy explores other avenues to diversify the rural economy such as IT based SMEs.</p> <p>It also recognises that reform of the Common Agricultural Policy is having profound impacts on agriculture. This includes offering big opportunities to farmers focusing on food quality, biomass and bio fuels, and environmental stewardship. It also however has impacts on hill farming with implications for farmers, biodiversity and landscapes.</p> <p>Yorkshire Forward's rural renaissance agenda will link to action on the Food and Drink cluster which will fully incorporate agricultural aspects and link local growers to regional markets, food processors and distributors.</p> <p>The RES recognises the opportunity to create new jobs and economic growth in areas like waste minimisation and recycling, forestry, energy crops and organic farming. Doing so will address the need to promote 'sustainable production and consumption' that is identified regionally as well as nationally and link with the national 'Business Resource Efficiency and Waste' programme. Much of the land based activity will be focused in rural areas and the coast.</p>
Habitat, Biodiversity & Landscape	<p>The RES aims to achieve an integrated, sustainable economy by utilising the full potential of the Regions unique physical and cultural assets, maximising resource efficiency and conserving and enhancing its environment.</p> <p>One objective is to avoid damage to valued environments and instead use and enhance them as assets (e.g. countryside, green spaces, heritage and great buildings, wildlife and special habitats).</p>

Strategy Title	Yorkshire and Humber Regional Economic Strategy (RES) 2006 - 2015
	<p>The heritage and many outstanding areas of countryside and coastline in the Region – including more land in national parks than anywhere else in England – mean Yorkshire and Humber’s natural and built environment is a huge asset. One that, if carefully managed and enhanced, will attract tourists, businesses and employees. In areas such as York and North Yorkshire the superb environment of much of the sub-region and especially the national parks and coast will help to foster environmentally led economic development.</p> <p>Activities like tourism will be managed in such a way as to conserve fragile environments and reap economic rewards together, for example in the Regions national parks. In addition, the RES encourages environmentally-led regeneration.</p> <p>The RES recognises that protecting and maintaining its green infrastructure is important. In Wakefield, regeneration is based on ‘The Emerald Ring’ – a tree lined boulevard extending the existing partial ring road around rather than through the core of the city. This will reconnect the centre with the neighbourhoods next to it and make the centre more people friendly. Rotherham plans to become a town of connected streets and great spaces, set in a beautiful landscape of parkland and meadows where the river is the focus for recreation and living.</p> <p>Finally the RES recognises the need to ensure development pressures do not result in damage to designated sites, and where possible ensure development enhances their value.</p>
Buildings and Construction	<p>The strategy seeks to apply high energy and environmental and design standards to buildings and neighbourhoods. Development supported by RDA resources will be required to meet high standards such as ‘BREEAM Excellent’ for energy efficiency and Secure by Design and be consistent with the wider detail in English Partnership’s quality and price standards that support sustainable design.</p> <p>Insisting on high design and energy standards in new buildings will pay dividends in the long term through reducing running costs and creating a more attractive region.</p>
Industry	See previous section on industry.
Transport	The RES supports the freight strategy and recognises the importance of improving access to the Hull and Humber ports.
How does this strategy contribute to the long term reduction of GHG Emissions?	The RES intends to respond vigorously to climate change by integrating sustainable development into activity and mainstreaming practical projects. It will reduce polluting emissions, dependency on fossil fuels and create new business opportunities – for instance by reducing waste, promoting efficient and renewable energy, and managing flood risks. The Region will take firm and imaginative action to encourage use of renewable energy and ‘resource productivity’ in businesses.
How does this strategy contribute to the delivery of adaptation actions?	As well as directly reducing economy-related greenhouse gas emissions directly, the region will mitigate pollution through local schemes to offset emissions – such as enhanced land management and woodland creation.

C1.5 Yorkshire and Humber Regional Housing Strategy

Strategy Title	Yorkshire and Humber Regional Housing Strategy (2005 – 2021)
Originator	Regional Housing Board / Government Office of Yorkshire and Humber
Published Date	2005
Target Area	Yorkshire and Humber Region
Statutory or Non Statutory?	Regional Housing Strategies are non-statutory documents. They belong to the Region and are not approved or signed off by Ministers.
How the Strategy is Prepared?	<p>Regional Housing Strategies were introduced by the Communities Plan (2003). Regional Housing Boards were responsible for their production, but since September 2006 this responsibility has passed to Regional Assemblies. The current Yorkshire and Humber Regional Housing Strategy was prepared by the Regional Housing Board.</p> <p>The Regional Director of the Government Office for Yorkshire and the Humber chaired the Board. The Board also comprised Yorkshire and Humber Assembly, Yorkshire Forward, the Housing Corporation, South Yorkshire and Hull and East Riding Pathfinders, English Partnerships and the Regional Housing Forum.</p> <p>The Pre-Draft consultation of the Regional Housing Strategy was launched at the end of October 2004. The Regional Housing Board drafted a consultation leaflet containing 14 headline questions to encourage and focus debate. GOYH, supported by David Cumberland Housing Regeneration Ltd and the Regional Housing Forum, held a series of workshops in Autumn 2004, chaired by Regional Housing Board members and sub-regional partnership chairs.</p> <p>These events enabled GOYH to engage with over 400 people from LAs (both officers from housing, regeneration and planning as well as members), RSLs, private sector, market renewal pathfinders and regional agencies. The private sector event attracted over 60 firms.</p> <p>This pre-draft consultation work fed into the thinking on the preparation of the first draft of the RHS, which was launched on 28 February for 10 week consultation.</p> <p>The sustainability appraisal of the RHS began in 2004 and was led by a steering group chaired by the Yorkshire and the Humber Assembly. This informed the preparation of the RHS on an ongoing basis.</p> <p>The RHS has been rural proofed in accordance with the Countryside Agency checklist for policy makers. Consultation with rural organisations in the region took place in autumn 2004, alongside continual systematic consideration of rural area needs as an integral part of the evolving shape of the strategy.</p>
Decision Making Processes	<p>For the RHS, links between it, the RES and the emerging RSS are crucial. The roles of these strategies are distinct but complementary. Housing has a critical role in creating places where people want to live – places where businesses want to invest and thus promoting economic opportunities. Housing is the largest consumer of land, and the housing market is strongly shaped by the strength of the economy.</p> <p>Since September 2006 decision making on regional housing now comes under the remit of the Yorkshire and Humber Assembly.</p> <p>There are strong links between the RSS and the RHS. The RSS supports RHS by providing an appropriate scale of housing provision to meet the</p>

<p>Strategy Title</p>	<p>Yorkshire and Humber Regional Housing Strategy (2005 – 2021)</p>
	<p>needs of the region and a distribution of new homes which enables the variety of different housing needs to be met. This means regional housing numbers are specified in the RSS.</p> <p>The RHS supports the RSS by:</p> <ul style="list-style-type: none"> • Providing a framework and supporting evidence for new, affordable and attractive housing for our region, which creates positive places and in turn attracts new economic opportunities; • Focusing on brownfield development within our urban areas, reducing urban sprawl and creating sustainable patterns of development; • Providing the investment framework for essential housing provision in our rapidly growing urban and rural areas, providing houses for key workers and ensuring the continued growth of the regional economy; • Providing a clear strategy for the improvement or replacement of housing to support strengthening the housing market in areas of low, changing or fragile demand.
<p>Purpose and Aims of the Strategy</p>	<p>The purpose of the Housing Strategy is to influence the creation and management of housing and neighbourhoods with the objective of creating sustainable communities.</p> <p>The initial vision for the RHS (2003) was to “provide good quality housing and successful neighbourhoods that meet the aspiration of current and future residents”. This vision has been extended for the 2005 housing strategy. The RHS now aims to “Work to ensure the delivery of a range of high quality housing and services in successful neighbourhoods, contributing to a superb quality of life for current and future residents.”</p> <p>The vision will be achieved by:</p> <ul style="list-style-type: none"> • Becoming world class in design, quality and energy efficiency to deliver homes that are designed for life and adopt environmental best practice; • Delivering the right supply of affordable, attractive and high quality housing in the right locations to meet further economic growth. This will include replacing housing that is unwanted and does not meet modern living requirements at a faster rate than now, and targeting affordable housing; • Building on the best community participation in housing; • Creating sustainable, cohesive and tolerant communities where people want to live and continue to live, and which are able to respond to people’s housing aspirations as they change and develop. This will include developing “pathways” to diverse housing requirements within communities and placing the concept of “lifetime homes” at the centre of policy making; • Renewing disadvantaged inner urban neighbourhoods and large monolithic council estates by rebuilding viable mixed income communities by reducing concentrations of poverty and worklessness, and delivering a right mix of housing tenure and types; • Developing high quality services and provision for all vulnerable groups and which, wherever possible, are prevention based and support

Strategy Title	Yorkshire and Humber Regional Housing Strategy (2005 – 2021)
	<p>independent living.</p> <p>The RHS is focused around three themes:</p> <ul style="list-style-type: none"> • <u>Creating better places</u>. This is about responding to the diversity of markets and improving neighbourhood infrastructure and facilities; • <u>Delivering better homes, choice and opportunity</u>. This is about delivering choice and opportunity for all our people to meet their housing aspirations, and to improve housing condition and services for all; and • <u>Fair Access</u>. This is about being sure the requirements and preferences of all parts of communities are met by sensitive and appropriate housing solutions, and that obstacles faced by specific groups to accessing their housing choices are removed. <p>Finally the RHS sets out key principles of delivery and the resources available to deliver the strategy. This includes moving towards a Sustainable Development Standard for housing in Yorkshire and the Humber to ensure the region grows in a sustainable way – balancing economic, social and environmental considerations.</p>
SECTORS THAT IMPACT ON GREENHOUSE GAS EMISSIONS	
Power Generation	<p>The RHS refers to the “Energy Efficiency Commitment” (EEC), under which energy suppliers are required to work towards delivering energy efficiency targets with their customers, with funding available from the energy companies which can be used alongside other public and private funding.</p> <p>The RHS recommends Local authorities should therefore develop, or extend, their energy efficiency strategies to include:</p> <ul style="list-style-type: none"> • Linking to the “Warm Front” programme, their referral and support arrangements; • Maximising the support from energy companies, including the Energy Efficiency Commitment funding; • Provision of heating, insulation and renewable energy schemes for householders in the private sector. This is to be achieved either independently or in partnership with agencies such as Energy Efficiency Advice Centres; • Promoting renewable energy sources in all developments; and • Consideration of Combined Heat and Power and Community Heating as measures that could be utilised during refurbishment or new build programmes. <p>When considering Sustainability Design Standards the strategy states:</p> <ul style="list-style-type: none"> • Greenhouse gas emissions from housing should be as low as practicable; and • Opportunities for renewable energy use and combined heat and power systems should be investigated for all new developments.
Transport	<p>The strategy recommends new housing should be planned with a view to realistic potential for employment opportunities close by to prevent immediate difficulties in the stability of the housing market or the necessity for long</p>

Strategy Title	Yorkshire and Humber Regional Housing Strategy (2005 – 2021)
	<p>distance car commuting and impacts from it.</p> <p>It highlights the importance of housing located in proximity to support services, facilities and infrastructure such as schools, shops, play areas and public transport routes.</p> <p>It references the Sustainable Design Standards which state:</p> <ul style="list-style-type: none"> • Housing development, including related services and economic development should not result in any net increase in car traffic; and • Housing should only be developed where amenities such as schools, food shopping, health care facilities, are available within walking distance or short journeys by public transport except in rural areas where there are overriding social benefits from the housing.
Domestic	<p>The RHS note total housing completions have averaged 16,500 over the last 3 years (2002 – 2005). The private sector accounts for 90 - 95% of all this new build.</p> <p>The top priority for the regional strategy is to transform neighbourhoods and areas facing low, changing or fragile demand but which are otherwise sustainable.</p> <p>The strategy’s second priority is improving accessibility in high demand areas (close to public transport services, a range of community facilities and where affordable housing is needed to meet the needs of local economies) and sustainable rural communities with populations of 10k or less.</p> <p>Overall the Regional Housing Strategy aims to deliver the right supply and range of housing in the right location that:</p> <ul style="list-style-type: none"> • Support economic growth and foster urban renaissance through the reversal of attitudes towards urban living. This means integrating housing policy within the overall framework for an urban area, aiming to build a sustainable community where people are willing to invest socially or economically; • Clear un-wanted, obsolete and poor quality homes and replace them with housing that meets the aspirations of both existing and new residents; • Deliver a range of affordable housing in those parts of the region where high house prices either prevent local people from achieving their housing aspirations or are constraining economic growth; • Respond effectively to the affordable housing needs of rural communities, and the vital role of our Market Towns as places to live and work; and • Deliver excellence in design and develop local skills and capacity. <p>Sustainable Design Standards identify opportunities for local sourcing of products or material, local labour and training.</p>
Industry	<p>The RHS recognises opportunities for the use of off site manufacturing should be considered for new housing and renewal areas, in particular the use of timber framed construction which increases carbon sink, reduces emission, increases the speed of housing supply and improves energy efficiency.</p>
Agriculture	<p>No direct reference</p>

Strategy Title	Yorkshire and Humber Regional Housing Strategy (2005 – 2021)
Commerce	<p>Areas of opportunity are within the city regions [three widely defined areas in this region, based on the districts around and interacting with each of Leeds, Sheffield and Hull and the Humber Ports].</p> <p>The region's rural and coastal areas face different patterns of housing problems and wider issues. These need specific approaches and interventions that address not only market pressures, but economic restructuring, issues of peripherality such as poor access to services.</p> <p>The RHS recognises it is important that actions to create more balanced housing markets, for example investment in existing stock, clearance and replacement, and steering the location and types of new homes, take account of economic objectives. One opportunity is for a growing economy to stimulate housing demand near to where jobs are being created.</p> <p>The amount of new housing in each district will need to help achieve a number of objectives such as supporting economic growth and urban renaissance, providing affordable homes, and using urban capacity and Brownfield sites.</p>
AREAS OF POTENTIAL ADAPTATION	
Sea Level Rise	No direct reference.
Flooding	No direct reference.
Water Resources	No direct reference.
Agriculture	No direct reference.
Habitat, Biodiversity & Landscape	<p>The RHS recommends housing schemes include green spaces where possible, providing planting which is sympathetic to the existing local environment and being sensitive to the impacts on wildlife.</p> <p>The Sustainable Design Standards state the biodiversity, wildlife, landscape and recreational qualities and benefits of proposed housing sites should be assessed and any important benefits safeguarded or substitute on or off sites as part of the development package.</p> <p>In order to raise attractiveness and cohesiveness of neighbourhoods green infrastructure should be designed into any new developments and renewal schemes to provide general attractiveness, and improve opportunities for communities to be physically and socially active. Public space should be integral to new developments and renewal schemes.</p>
Buildings and Construction	<p>The RHS recognises that new houses will need to be designed and built with a much longer design life (possibly 250 years or more). It is also important to ensure houses are of good quality and are 'future proofed' in terms of factors such as attractive design, flexibility, and very high environmental and energy standards.</p> <p>The Housing Corporation have raised their minimum Eco Homes standard from "good" to "very good". Where RHB funding is utilised to support RSL developments it is expected that they should achieve Eco Homes 'Excellent' standards. Partners will also need to achieve a high proportion of schemes using modern methods of construction to enhance quality, delivery and sustainability.</p> <p>The strategy aims to achieve well designed and energy efficient homes in sustainable neighbourhoods. This includes ending fuel poverty for vulnerable</p>

Strategy Title	Yorkshire and Humber Regional Housing Strategy (2005 – 2021)
	<p>households by 2010, and for all households by 2016; increasing average home energy ratings across all homes to Standard Assessment Procedure (SAP) 65 by 2016 and reducing the percentage of homes with a SAP rating of less than 30 to below 1% for social housing and 2% [or less] for private sector housing.</p> <p>The Regional Housing Board is funding an Eco-Homes project in South Yorkshire. This demonstrates an approach to addressing fuel poverty, and it is hoped, this can be replicated in new developments including rural areas.</p> <p>Regional bodies and partners will work to develop a Sustainability and Design Code that will build on the following principles:</p> <ul style="list-style-type: none"> • Designing for people with a range of needs, including dwellings to lifetime homes standard wherever possible in order to provide maximum flexibility; • Designing to build in security, incorporating “secure-by-design” principles in all schemes; • Achieving a high quality of appearance, especially in regeneration areas where a good image could help change the perception of a location; and • Designing housing which is in keeping with the character of an area, reflects existing good aspects of distinctiveness in local traditional design and reinforces a sense of place and identity. <p>The region will also explore proposals for a Zero Energy Development built on the same principles as the Beddington Zero Energy Development (BEDZED). The aim is to develop capacity in the region to design and construct high specification dwellings and to act as a pathfinder to inform future standards. Particular attention should be given to developing expertise and capacity in sustainable construction technologies including reclamation, reuse and recycling of building materials and components, energy efficiency, combined heat and power/ district heating and renewable energy sources.</p>
Industry	See section on Industry above
Transport	See section on Transport above
How does this strategy contribute to the long term reduction of GHG Emissions?	The RHS provides strong guidance on both housing strategy (i.e. what should happen where / what the priorities are) and also implementation and physical delivery (i.e. how to achieve sustainable design). There is a strong emphasis on fuel efficiency and renewable power generation.
How does this strategy contribute to the delivery of adaptation actions?	In terms of adaptation the strategy does not consider the implications of climate change such as flood risk, water availability and domestic water consumption, and construction of housing to address issues of extreme weather.

C1.6 Yorkshire and Humber Regional Waste Strategy

Strategy Title	Lets Take It From The Tip: Yorkshire and Humber Regional Waste Strategy
Originator	Yorkshire and Humber Assembly
Published Date	July 2003
Target Area	Yorkshire and Humber Region
Statutory or Non Statutory?	European Directives are enforcing the adoption of waste management practices. The UK Government has incorporated EU targets in the Waste Strategy 2000 which sets statutory targets for waste. In addition Government Guidance (PPS10) recommends that Regional Technical Advisory Bodies (RTAB) be set up to collate data on waste and provide advice on options for managing waste in line with Government policy. In response to this, Yorkshire and Humber published the Regional Waste Strategy which aims to develop sustainable waste management systems for the region. Therefore the Waste Strategy is a statutory document in that it has to adhere to Government guidance; however its content is not enforceable. .
How the Strategy is Prepared?	<p>The development of the Waste Strategy for Yorkshire and Humber has been co-ordinated by the Yorkshire and Humber Assembly. However, the role in overseeing the formulation of the strategy has been undertaken by a Steering Group. This Group is made up of organisations with an interest in waste, including Government Office of Yorkshire and Humber, local authorities, the Environment Agency, waste management industry and environmental groups. During the preparation of the strategy the Steering Group also operated as this region's Regional Technical Advisory Body (RTAB) on waste.</p> <p>Consultation on the strategy was carried in two phases. Phase 1 involved local authorities, environmental groups and waste management companies and considered possible options for managing municipal waste. Phase 2 of the consultation provided an opportunity to comment on the draft version of the strategy. Workshops were held in the region to raise awareness of the draft strategy and encourage more people and organisations to come forward with views and suggestions. The feedback received from phase 2 has shaped the published regional strategy.</p> <p>Consultants, M.E.L. were employed by the Assembly to undertake the background technical research to underpin the strategy and in particular to find out how much and what sort of waste is produced in the region and how it is currently managed. M.E.L. also carried out a review of current and good practice in waste management.</p> <p>Monitoring will take place annually and be publicly reported. The first review of the strategy took place during 2005.</p>
Decision Making Processes	The 2003 publication is the first waste strategy for the Yorkshire and Humber Region. It recognises the importance of engaging all sectors of the community (local councils, local strategic partnerships, business, families and individuals) in action on waste will be necessary to achieve the targets and objectives of the strategy. Therefore community support and involvement is one of the strategies key objectives. The target is to implement a region-wide waste awareness campaign by the end of 2004,

<p>Strategy Title</p>	<p>Lets Take It From The Tip: Yorkshire and Humber Regional Waste Strategy</p>
	<p>and evaluate and report on its effectiveness by March 2005. Other activities undertaken under this objective include seminars to Local Strategic Partnerships and local authorities on regional waste issues, such as market development and new legislation.</p> <p>This strategy identifies that a key role for the Yorkshire and Humber Assembly is to influence the development of new waste policy and legislation and ensure that the interests of the region are promoted.</p> <p>The strategy acknowledges its important linkages to other regional strategies. It recognises the contribution it will make to the vision of a sustainable future for Yorkshire and Humber that is expressed in the strategic framework, Advancing Together. The Waste Strategy will also help deliver the objectives of the Regional Economic Strategy.</p> <p>The strategy also includes regional planning policies on waste that have been included in Yorkshire and Humber Regional Planning Guidance. This has now been superseded by the draft RSS, which includes up to date details on the policies for regional waste management.</p>
<p>Purpose and Aims of the Strategy</p>	<p>The Waste Strategy primary aim is to help develop sustainable waste management systems in the region. The purpose of the strategy is to make it easier, quicker and more cost effective to set up sustainable waste management systems in the region. These must be systems that yield maximum environmental, social and economic gains and allow us to reach, and even exceed, Government targets and legislative requirements.</p> <p>The amount of waste being produced is rising every year at a rate of around 3%. By 2020 there will be twice as much municipal waste as now.</p> <p>This region is one of the worst performing in England with an average regional recycling rate of around 6%. This will need to be improved to 21% by 2005/6 to attain the first government target deadline.</p> <p>The purpose of this strategy is to address these barriers to progress in order to facilitate the development of sustainable waste management across Yorkshire and Humber. The strategy will do this by:</p> <ul style="list-style-type: none"> A. Stating the region’s agreed objectives for waste management B. Collating and interpreting best available data on waste C. Providing the regional planning framework for waste D. Developing actions to address the barriers to progress E. Supporting local and sub-regional Municipal Waste Management Strategies <p>The strategy sets out 4 objectives and an action plan for how the targets can be achieved and sustainable waste management practices be established.</p> <ul style="list-style-type: none"> • <u>Objective 1</u> Gain community support and involvement in the delivery of the strategy; • <u>Objective 2</u> Reduce waste production and increase re-use, recycling and composting; • <u>Objective 3</u> Manage residual waste in the most sustainable way; and • <u>Objective 4</u> Provide technical support and advice. <p>The strategy is in line with the EU waste hierarchy principle as it prioritises</p>

Strategy Title	Lets Take It From The Tip: Yorkshire and Humber Regional Waste Strategy
	<p>waste reduction and has a target is to cut the average annual increase in waste from 3% to 2% by 2008/9.</p> <p>Regional targets are to achieve statutory targets for recycling and composting household waste and diverting waste from landfill. Other forms of residual waste management, such as gasification, pyrolysis and mechanical biological treatment - are likely to become technically feasible and commercially viable and so offer more sustainable options.</p>
SECTORS THAT IMPACT ON GREENHOUSE GAS EMISSIONS	
Power Generation	<p>There are a number of schemes across the region that generates energy from waste recovery (this includes energy from waste, composting and recycling).</p> <p>The Humber sub region generates energy from a waste/combined heat and power plant with a capacity of 56,000 tonnes per year. This is being developed at Stallingborough in North East Lincolnshire. In Sheffield, South Yorkshire the energy from waste plant has a capacity of 135,000 tonnes per year. A new plant has recently been constructed to replace this facility and has an increased capacity of 220,000 tonnes per year. West Yorkshire there is a energy from waste plant in Kirklees which treats 135,000 tonnes of waste per year.</p> <p>The main concerns over energy from waste plants are that they pose a pollution and health risk, contribute to greenhouse gas emissions and discourage investment in waste reduction and recycling. The strategy recommends the way forward is to acknowledge that there may be a need for some increased capacity for incinerator energy plants from waste but that this should be kept to minimum. It could be provided on a local/district level with a higher number of lower-capacity plants (e.g. 50,000 tonnes capacity per year) or else on a sub-regional or regional basis with higher capacity plants (e.g.150,000 tonnes per year).</p>
Transport	<p>The majority of recycling in Yorkshire and the Humber takes place through bring schemes rather than kerbside collection schemes. Bring schemes require people to take their recyclables to recycling banks and these can be at either civic amenity sites or other sites, such as supermarkets or public car parks. This could result in additional journeys to recycle waste.</p>
Domestic	<p>The strategy sets a target to reduce the annual increase in waste production per household to 2% by 2008/9.</p> <p>In 1999/2000 2.2 million tonnes of waste was generated by households. West Yorkshire is the largest producer, followed by South Yorkshire, the Humber and North Yorkshire. This is in line with the sizes of the populations and the number of households in each sub-region. The current levels of biodegradable waste going to landfill causes high emissions of methane, a significant greenhouse gas.</p> <p>In 1999/2000, 162,000 tonnes of municipal waste was collected for recycling. This represents an average recycling rate of municipal waste across the region of 6%. This figure is below the national average.</p> <p>The recycling and composting targets for household waste for the local authorities in the region are summarised below:</p>

Strategy Title	Lets Take It From The Tip: Yorkshire and Humber Regional Waste Strategy
	<ul style="list-style-type: none"> • 2005/6: 21% • 2010/11: 30% • 2015/16: 33.3% <p>To achieve these targets there will need to be more kerbside collection schemes to serve communities across all parts of the region.</p>
Industry	<p>In 1998/1999 industrial companies in the region produced 9.5 million tonnes of waste and commercial businesses produced 2.2 million tonnes. Yorkshire and the Humber region is judged to produce 15.6% of all industrial and commercial waste produced in England and Wales. This is despite the fact that it has only 8% of the businesses and 9% of the employment. This is due to large tonnages of waste produced by the region's power stations (mainly ash and mineral residues) and its iron and steel industry (mainly slags), amounting to 4 million tonnes.</p> <p>In addition 8.1 million tonnes of construction and demolition waste was treated or disposed of within the region in 1999. 27% of this was recycled into aggregates or soil, 12 % was reused on landfill sites for restoration or engineering, 33% was landfilled as waste and 35% was sent to sites exempt from waste management licensing for reuse or recycling. The proportion disposed of to landfill (33%) was the highest of all regions and significantly higher than the national average of 24%.</p> <p>Waste is economically valuable, and better recycling rates together with new markets for recycled products could create 1500 new jobs across the Yorkshire and Humber region. However, the market for recycled waste materials is under - developed in the Yorkshire and Humber region.</p> <p>In the region's manufacturing processes, only 10% of the raw materials used end up in the final product; the rest is wasted. The market for waste materials that can be recycled is under-developed across the whole of the UK, including in this region. Even if local authorities were able to substantially increase the quantities of waste collected for recycling, this material could not be reprocessed and sold within the region. The consequences of this are that the value of waste collected for recycling is low and unstable and does not significantly offset the high costs of collecting it.</p> <p>Businesses involved in reprocessing, distributing and selling goods and materials made from recyclates need appropriate support to ensure they are able to secure adequate investment, identify the most appropriate technology and secure necessary planning permissions and waste licenses.</p>
Agriculture	Not directly referenced in this strategy, although agricultural waste is probably grouped with industrial/commercial waste in the statistics.
Commerce	This is combined with industrial and domestic issues.
AREAS OF POTENTIAL ADAPTATION	
Sea Level Rise	No direct reference.
Flooding	No direct reference.
Water Resources	No direct reference.

Strategy Title	Lets Take It From The Tip: Yorkshire and Humber Regional Waste Strategy
Agriculture	No direct reference.
Habitat, Biodiversity & Landscape	No direct reference.
Buildings and Construction	New building design and layout can contribute to effective waste management. Sustainable waste management initiatives may require on site infrastructure as part of new development. Businesses may require an additional plant, or a larger site area, in order to put waste minimisation plans into practice. Specific provision should be made for space to allow for the separation and collection of waste, consistent with the type of development in question, whether a housing development, employment, retail, leisure or mixed use.
Industry	See section on Industry above.
Transport	See section on Transport above.
How does this strategy contribute to the long term reduction of GHG Emissions?	<p>Reducing waste, re-using it and recycling can reduce greenhouse gas emissions and contribute to the region's target to cut greenhouse gas emissions by 20% by 2010 compared to levels in 1990.</p> <p>The strategy sets targets but it is weak on potential solutions and actions. There needs to be a greater focus on the business sectors to match the targets set for the domestic sector.</p>
How does this strategy contribute to the delivery of adaptation actions?	Adaptation measures have not been considered within this strategy. This is an area that can be developed in a revised regional waste strategy but will need to be linked with adaptation measures for industrial, commercial and domestic sectors.

C1.7 Yorkshire and Humber Regional Cultural Strategy

Strategy Title	A Vision For Culture In The Yorkshire and Humber
Originator	Yorkshire Cultural Consortium
Published Date	Unknown
Target Area	Yorkshire and Humber Region
Statutory or Non Statutory?	This is a non-statutory document that provides a strategic framework for culture across the Yorkshire and Humber Region.
How the Strategy is Prepared?	The Yorkshire Culture Consortium published the vision for culture.
Decision Making Processes	The strategy sets out principles and priorities which can be shared by the wide range of companies, individuals and organisations that have an interest in the region's cultural life.
Purpose and Aims of the Strategy	<p>The purpose of the cultural strategy is to link the work of all the individual people, organisations and agencies that have a bearing on the quality of life in the Region.</p> <p>Two principles underlie the strategy:</p> <ol style="list-style-type: none"> 1. Culture is not an extra, an add-on; it is a fundamental element of the lives of us all, as important to a fulfilled life as prosperity, health and education. 2. Culture belongs to everyone <p>Rather than seeing some aspects of culture as intrinsically more valuable than others, the Consortium believes that everyone, resident and visitor alike, deserves the best.</p> <p>The Consortiums aspiration is that by 2010 everyone in the region leads a rich, diverse and fulfilling cultural life, with a strong sense of community and a healthy lifestyle.</p> <p>The strategy lists several priorities to focus actions within the region.</p> <ul style="list-style-type: none"> • Continuity in Development; • Opportunity – particularly opportunity of access, awareness, cultural facilities, design, distribution, excellence and influence; • Social and Economic Change; • Sustainability; • Understanding.
SECTORS THAT IMPACT ON GREENHOUSE GAS EMISSIONS	
Power Generation	This is not addressed within the strategy.
Transport	This is not addressed within the strategy.
Domestic	<p>The strategy recognises the quality of life in Yorkshire and Humber will keep and attract the people who can carry the region forward.</p> <p>The vision views the achievement of the sustainability priority as maintenance of high and stable levels of economic growth and employment, and social progress which recognises the needs of everyone. It aims to use culture to contribute towards this.</p>

Strategy Title	A Vision For Culture In The Yorkshire and Humber
	<p>Culture can provide the catalyst for a range of social and economic benefits, for example:</p> <ul style="list-style-type: none"> • Access to education and improved educational attainment • Economic and environmental regeneration • Health Improvement • Innovation and Creativity • Personal Development • Promoting the understanding of cultures, faiths and traditions • Reduction of crime and disorder • Social inclusion and regeneration
Industry	<p>Culture is a key driver of the new economy; culture and the creative industries make a substantial contribution to a thriving regional economy. To make the most of the economic benefits, the strategy promotes innovation. In order to maximise the benefit to the cultural sphere, the region's strengths in research and development and technology transfer should be encouraged. The strategy recognises the importance of working with Yorkshire Forward to encourage a higher business birth rate in the cultural industries.</p> <p>The creative and cultural industries are high-skill businesses, and the region's skills base needs continuous upgrading.</p>
Agriculture	No direct reference.
Commerce	In terms of regeneration the region's former industrial base has been through great decline and change. Culture, tourism and the creative industries can make a big contribution to the regeneration of the region's economy, creating new businesses, jobs and growth, and making full use of the high-quality buildings left from previous investment. The case for encouraging and supporting this kind of development has to be made successfully to all the region's investors, decision-makers and planners.
AREAS OF POTENTIAL ADAPTATION	
Sea Level Rise	No direct reference.
Flooding	No direct reference.
Water Resources	No direct reference.
Agriculture	No direct reference.
Habitat, Biodiversity & Landscape	In terms of the 4 th priority of sustainability, the strategy recognises the importance of effective protection of the environment and prudent use of natural resources.
Buildings and Construction	This is not addressed within the strategy.
Industry	See section on industry above
Transport	No direct reference.

Strategy Title	A Vision For Culture In The Yorkshire and Humber
<p>How does this strategy contribute to the long term reduction of GHG Emissions?</p>	<p>This is a brief strategy which does not currently have a direct relationship with climate change. It has a strong economic focus and focuses on how cultural industries can provide social, economic and environmental benefits.</p> <p>There is an opportunity to use the cultural strategy to strengthen perceptions and provide clear messages on climate change to diverse communities.</p>
<p>How does this strategy contribute to the delivery of adaptation actions?</p>	

C1.8 Yorkshire and Humber Regional Manufacturing Action Plan

Strategy Title	Manufacturing in Yorkshire and Humber: Action Plan
Originator	Yorkshire Forward
Published Date	2003
Target Area	Yorkshire and Humber Region
Statutory or Non Statutory?	This is a non-statutory document and integral to Y&H RES. The Government published its Manufacturing Strategy in May 2002 and this provides an essential foundation on which regional work to support manufacturing can build. The manufacturing action plan is the Region's response to Government guidance.
How the Strategy is Prepared?	The preparation of the document was led by Yorkshire Forward and supported by the Yorkshire and Humber Assembly, and the four sub-regional action plans led by partnerships for West Yorkshire, South Yorkshire, York and North Yorkshire and the Humber.
Decision Making Processes	<p>The action plan provides a mechanism to 'join up' the different economic development, business support and regeneration funding streams to target resources on strategic priorities. It represents the route by which Yorkshire Forward will invest resources.</p> <p>This Manufacturing Action Plan will be delivered by 'the region'. A wide spectrum of strategic bodies, businesses, interest groups and delivery agencies across all sectors and parts of the region will have roles to play. This includes strong dialogue with and input from manufacturing business, and roles for the three key strategic regional agencies – The Yorkshire and Humber Assembly; The Government Office; and Yorkshire Forward.</p>
Purpose and Aims of the Strategy	<p>The Strategy contains a mixture of cross-sectoral actions from which manufacturing will benefit alongside other sectors. Additionally, there are actions specifically crafted to support the needs and opportunities within manufacturing. This Manufacturing Action Plan for Yorkshire and Humber fully utilises and builds on the platform provided by the RES.</p> <p>The purpose of this action plan is to make the necessary connections between the RES and the Government's Manufacturing Strategy in order to articulate a clear and coordinated framework of support for Yorkshire and Humber manufacturers.</p> <p>Six cross cutting themes reinforce how the RES will deliver the 'umbrella' of sustainable development and an effective approach to economic development. These are also relevant to this Manufacturing Action Plan and its delivery, to ensure that economic progress is linked to the region's social and environmental goals.</p> <p>The six cross cutting themes are:</p> <ol style="list-style-type: none"> 1. Environmental good practice – simultaneously conserving what is special about the region's environment, promoting highly efficient use of energy and natural resources, and harnessing environmental quality as an economic strength; 2. Partnership - delivery should be through inclusive, effective partnerships involving businesses, public agencies and the voluntary and community sector, who plan together to implement their distinctive responsibilities; 3. Geographic adaptation - the differing needs and characteristics of places

Strategy Title	Manufacturing in Yorkshire and Humber: Action Plan
	<p>across the region makes a flexible approach essential. Delivery will differ according to local needs, in both rural and urban areas;</p> <ol style="list-style-type: none"> 4. Social inclusion and diversity – take account of and benefit all those living and working in the region, particularly disadvantaged and excluded people, including minority ethnic communities, disabled, young and older people. It will advance social issues including healthy lifestyles, culture, housing and community safety; 5. Creativity, innovation and technology – we need to embrace radical innovative and imaginative thinking to benefit businesses and communities; including good use of technology and ICT in particular; and 6. Employment and skills - the Plan will be designed and delivered so as to maximise its contribution to improving skills, learning and the quality of employment in the region. <p>The cross cutting themes will be delivered in two main ways. First, all investments should be designed with the themes in mind, so that the themes influence the choices that are made and permeate the way projects are implemented. Secondly, certain actions are required to push forward the themes and take advantage of 'win-win' opportunities.</p>
SECTORS THAT IMPACT ON GREENHOUSE GAS EMISSIONS	
Power Generation	<p>Reliance on relatively heavy use of energy, natural resources and road transport presents a weakness to manufacturing.</p> <p>Environmental assets and good practice demand consideration, especially given the relatively high use of energy and natural resources used by manufacturers compared to other sectors, and increasing costs of waste disposal and non-renewable energy use (e.g. related to new 'eco-taxes').</p> <p>Action to promote renewable energy, attractive environments and resource efficiency has potential to improve long term competitiveness within manufacturing.</p> <p>The region will develop new ways of utilising energy and natural resources to release economic value, including Regional Energy Forum action to promote renewable energy, combined heat and power, energy efficiency, clean coal technology and to reduce greenhouse gas emissions –reducing the costs on business of a potential Climate Change levy.</p>
Transport	<p>The action plan identifies one weakness to manufacturing is poor access to the Regions airports. However, a strong point is relatively good transport infrastructure.</p> <p>Transport is a major issue in the region, and one that affects business success, quality of life and sustainability, including the region's target of reducing greenhouse gas emissions by more than 20%.</p> <p>Measures are required that reduce the need for travel and improve transport, especially by rail between Leeds and Sheffield, along the East Coast mainline, with other parts of the UK including Manchester and the North West and between London and Hull and London and Sheffield. Strong international air services are essential.</p> <p>The region needs to support the case for long term investment in its agreed transport priorities across all modes to ensure manufacturers can utilise a more efficient transport network.</p>

Strategy Title	Manufacturing in Yorkshire and Humber: Action Plan
	<p>The region will ensure early action is taken through the Government's Ten-Year Plan for Transport to deliver the seven regional transport priorities. These are currently:</p> <ul style="list-style-type: none"> • Trans- Pennine links; • Strategic north-south routes; • Leeds to Sheffield corridor; • Development of air transportation; ports and waterways; • Access to strategic economic zones; and • Strategic access to regional centres.
Domestic	<p>Public investment in areas such as health, education, transport and housing will provide market opportunities and help to ensure that the health and skills of the workforce support productivity.</p>
Industry	<p>In 2001, manufacturing output in Yorkshire and Humber was valued at £13.3 billion. Although in recent years this figure has been declining, it is predicted to expand by 26.4% in the next ten years (Yorkshire Forward/Experian Business Strategies, 2002). The sector is made up of approximately 15,850 firms and employs around 383,640 people full time. As such, manufacturing accounts for almost one-fifth (18.4%) of regional employment, a figure that is higher than the English average of 15.1%.</p> <p>The region's manufacturing sector is characterised by the presence of a high proportion of micro firms, with 71.1% of firms employing less than 10 people. A further 19.3% employ less than 50 people. Only 0.6% of firms employ more than 500 people. 0.6% of firms account for 20% of all those employed in manufacturing.</p> <p>Productivity is fundamental to the future of manufacturing, and real productivity improvements are required. The action plan proposes the following to achieve greater productivity:</p> <p>Strengthening competition – Manufacturers need to innovate, minimise costs and provide better quality goods and services to the customer, and to improve resource productivity to heighten long term competitiveness.</p> <p>Promoting enterprise and innovation – to unlock the potential of new technologies and working practices, supporting entrepreneurship and risk taking.</p> <p>Encouraging investment - to improve the stock of physical capital across the economy and specifically within manufacturing where investment will be vital to product development, process efficiency and long term competitiveness.</p> <p>Improving the skills base - to maximise the contribution of human capital to growth.</p> <p>Improving the productivity of public services – to ensure that the benefits of planned investment in public services, transport and infrastructure are maximised. The region needs higher levels of public investment to create the right infrastructure and environment for manufacturing firms to become more productive.</p> <p>West Yorkshire, South Yorkshire and the Humber all have a strong manufacturing presence in sectors such as metals, textiles, engineering and</p>

Strategy Title	Manufacturing in Yorkshire and Humber: Action Plan
	<p>chemicals. Manufacturing has been less prominent in North Yorkshire, but the sub-region does have a spread of manufacturing businesses in sectors such as food.</p> <p>Sectors within manufacturing that offer the prospect of much stronger growth will tend to be those that are largely based on higher value added activities, have close links to universities and research institutions, show investment in skills, technology and equipment and have the ability to adapt to change.</p> <p>Much of this change will be delivered through the investment in key clusters. The initial five are:</p> <ul style="list-style-type: none"> • Advanced Engineering and Metals, • Chemicals, • Digital Industries, • Bioscience and • Food and Drink. <p>Some clusters are more closely related to the manufacturing sector than others, although all have a manufacturing element on varying scales.</p> <p>Cluster-mapping work on the region’s Advanced Engineering and Metals cluster (Amtek UK and Ecotec, 2002) estimated that the region has £1.9bn of economic opportunity based on the value of local demand that is currently met by companies outside the region that could be met by companies within Yorkshire and Humber.</p> <p>In the long term, manufacturing output is expected to grow by 26.4% from its lowest point of £12.5bn in 2002 to £15.8bn in 2012 (based on 1995 prices). The only sectors expected to see declining output are machinery and equipment manufacturing (-7.8%) and textiles, clothing and footwear (-4.14%). Some sectors are expected to see exceptional growth including communication equipment (198.2%), office machinery and computers (162.4%) and electrical machinery (132%). In particular the manufacture of electrical machinery is set to become a major industry for the region in the future.</p> <p>Although output is increasing by over 25% in the next ten years, full time employment is predicted to fall by 13.6%. Employment increases will be seen in industries including communications equipment, computers, electrical machinery and instrument engineering.</p> <p>Despite a strong academic research base, investment in R&D in business is relatively low in Yorkshire and Humber and much better links are needed between higher and further education and business. The region will develop Centres of Industrial Collaboration and a regional Science Council, which will utilise investment in science and research, expand innovation support – including through the region’s Innovation Relay Centre - and promote international strategic alliances in research and development. The region will provide targeted support through the Regional Centre for Manufacturing</p> <p>The action plan identifies that business support should cover social enterprises and their particular needs, and promote the adoption of corporate social responsibility in business, including environmental good practice,</p>

Strategy Title	Manufacturing in Yorkshire and Humber: Action Plan
	<p>diversity, quality employment, work/life balance and healthy working lives. Schemes such as ‘Waste to work’ projects will back up the regional waste strategy by promoting jobs, social enterprise and business growth through waste minimisation and use of secondary resources. In addition the Regional Eco-Design and Innovation project will promote product development through eco-design, eco-efficiency and product life cycle analysis. The key aim is to deliver training and capacity building to regional manufacturers such that they can adopt sustainable development practices into the design and production of their goods.</p>
Agriculture	Food and Drink is one of the five regional clusters.
Commerce	The region will optimise the availability of land and property for business and have suitable land and property with appropriate utility infrastructure, available for businesses.
AREAS OF POTENTIAL ADAPTATION	
Sea Level Rise	No direct reference.
Flooding	No direct reference.
Water Resources	No direct reference.
Agriculture	Food and Drink is one of the five regional clusters.
Habitat, Biodiversity & Landscape	There is no specific guidance in the strategy
Buildings and Construction	The region will promote sustainable construction techniques and developments to build regional profile and spread good practice.
Industry	<p>The action plan identifies that one threat to growth in manufacturing is increased legislation (e.g. on environment) – and failure to respond to it (esp. SMEs). Regional supply chain initiatives will make the best use of local resources and products, integrate them into investor supply chains and seek higher value added contracts for existing businesses. The action plan also proposes the region will develop niche markets in environmental technologies and industries within all the key clusters.</p> <p>Promoting innovation within manufacturing - making full use of the region’s extensive science and research base – is therefore central to the future of manufacturing in the region. Yorkshire and Humber has an extremely strong research base, with the region’s ten universities investing over £240 million a year in research and development.</p>
Transport	<p>The action plan identifies one weakness to manufacturing is poor access to the Regions airports. However, a strong point is relatively good transport infrastructure.</p> <p>Transport is a major issue in the region, and one that affects business success, quality of life and sustainability, including the region’s target of reducing greenhouse gas emissions by more than 20%.</p> <p>Measures are required that reduce the need for travel and improve transport, especially by rail between Leeds and Sheffield, along the East Coast mainline, with other parts of the UK including Manchester and the North West and between London and Hull and London and Sheffield. Strong international air services are essential.</p>

Strategy Title	Manufacturing in Yorkshire and Humber: Action Plan
	<p>The region needs to support the case for long term investment in its agreed transport priorities across all modes to ensure manufacturers can utilise a more efficient transport network.</p> <p>The region will ensure early action is taken through the Government's Ten-Year Plan for Transport to deliver the seven regional transport priorities. These are currently:</p> <ul style="list-style-type: none"> • Trans- Pennine links; • Strategic north-south routes; • Leeds to Sheffield corridor; • Development of air transportation; ports and waterways; • Access to strategic economic zones; and • Strategic access to regional centres.
<p>How does this strategy contribute to the long term reduction of GHG Emissions?</p>	<p>The strategy recognises that industry is vulnerable to changing legislation but does not propose how to respond.</p>
<p>How does this strategy contribute to the delivery of adaptation actions?</p>	<p>The strategy could make the link that research and R&D could help businesses to reduce energy requirements and become more efficient. Such businesses could also lead in efficiency and renewable technology which will be an economic commodity in the future.</p>

C1.9 Yorkshire and Humber Coal Vision and Action Plan

Strategy Title	Vision for Coal: Coal vision and action plan for Yorkshire and Humber
Originator	Future Energy Solutions contracted by Yorkshire Forward – on behalf of the Yorkshire and Humber Regional Energy Forum.
Published Date	November 2005
Target Area	Yorkshire and Humber Region
Statutory or Non Statutory?	In May 2005 the UK Government published its strategy for developing carbon abatement technologies (CATs) for fossil fuel use. This strategy identified ten tasks covering technical development and non-technical issues. The Vision for Coal explores the opportunities for coal in the Region within the context of this UK strategy. The vision is a non-statutory document which seeks to influence future decision making regarding approaches to coal utilisation.
How the Strategy is Prepared?	<p>The report was commissioned by Yorkshire Forward and undertaken for the Government Office for Yorkshire and The Humber (GOYH), the Yorkshire and Humber Assembly (YHA) and Yorkshire Forward (YF). These three agencies comprise the Regional Energy Forum.</p> <p>The report builds upon the existing baseline provided by the “Coal – The Future” report.</p> <p>The vision included a stakeholder consultation exercise with key stakeholders. A stakeholder questionnaire was sent out to all consultees in advance of interviews to form a prompt for subsequent discussions. The overall consultation process was complemented and significantly strengthened by participation in and promotion of the project at the “Coal in the 21st Century” seminar held at Drax, in July 2005.</p> <p>25 consultees and organisations provided responses during the consultation process. These included UK Coal Plc, Yorkshire Coal Task Force, Yorkshire Forward, Associated British Ports, Barnsley Metropolitan District Council, British Energy, Climate Change Capital and Progressive Energy.</p>
Decision Making Processes	<p>The elements of a Coal Vision for Yorkshire and the Humber are very closely allied to both national and pan-European visions for coal. The Regional Energy Forum and other parties can take forward the actions within the report in the short term to facilitate the delivery of the longer-term Coal Vision.</p> <p>To enable the vision to be realised there is potentially some financial support available through the recently announced UK Government’s Carbon Abatement Technologies (CAT) Strategy.</p>
Purpose and Aims of the Strategy	<p>The Vision for Coal aims to develop a vision for coal that can capitalise on the region’s technical, infra-structural and geographical advantages to the maximum extent. Building on an earlier study (“Coal: The Future”, ABS Energy Research (2004)), the work aims to develop both a medium-term (10-15 years) view and a number of more detailed actions for the short term.</p> <p>The purpose of the report is to ensure that coal (and its associated methane) constitutes a significant part of the Regions’ future energy portfolio. This will help to mitigate possible security of energy supply issues brought about by the UK’s increasing dependence on imported gas.</p> <p>The vision provides a framework to show that the development of the</p>

Strategy Title	Vision for Coal: Coal vision and action plan for Yorkshire and Humber
	<p>Region's resources and assets (namely its coal mining industry and coal-fired power generation capacity) are consistent with the Region's commitment to reducing emissions of greenhouse gases and moving towards a low carbon economy.</p> <p>The principle findings of the report include:</p> <ul style="list-style-type: none"> • A ready UK market for all indigenously produced coal from both deep and surface mines; • Biomass is seen as an increasingly important part of the fuel mix for electricity generation; • The liberalised electricity market in the UK is part of a barrier to investment. Other factors include uncertainty about the exact shape and implementation of environmental legislation and the future value of carbon; • Cleaner coal technologies (CCTs) are available now that can significantly reduce specific CO2 emissions from electricity generation. In the longer-term deployment of these technologies in association with carbon dioxide capture and storage (CCS) would enable towards zero emission coal-fired power generation technologies (ZETs). <p>The reports main aims are:</p> <ul style="list-style-type: none"> • By 2020, to reduce specific carbon dioxide emissions from coal-fired electricity generation by 50% compared with 2005 levels; • To facilitate the expansion of the region's capacity to deliver biomass fuel as a co-firing source.
SECTORS THAT IMPACT ON GREENHOUSE GAS EMISSIONS	
Power Generation	<p>Coal is extremely important to the Y&H Region. In 2003, the Region produced 33% of the coal mined in the UK (by the end of 2004, with the closure of the Selby mine, this is expected to decline to 22%). In 2002, the Region produced 26% of the UK's coalfired power and three of the UK's largest coal-fired power stations – Drax, Eggborough and Ferrybridge – are located within the Region. Indeed, Drax is the largest coal-fired power station in Europe. These three coal-fired power stations have a total installed capacity of 8GWe and comprise 14 separate boiler units. There are 6 units each of 660MWe output at Drax and 4 units each of 500MWe output at both Eggborough and Ferrybridge.</p> <p>The region's coal-fired power stations at Drax, Eggborough and Ferrybridge are currently approaching or exceeding their original design lifetimes. Electricity generation from coal through to 2020 compared with 2005 levels implies at the very least that the three flagship coal-fired power stations in the region remain operational. However, this is not absolutely certain as there are outstanding issues relating to the implementation of the LCPD (Large Combustion Plant Directive – EU legislation controlling emissions) and investment in power stations to remove sulphur dioxide from flue Gas (FCD).</p> <p>The report identifies opportunities to provide a major contribution to the Region's challenging targets for carbon dioxide reductions; and benefits in respect of security and self-sufficiency in electricity supply (plus the</p>

Strategy Title	Vision for Coal: Coal vision and action plan for Yorkshire and Humber
	<p>opportunity to export electricity and its economic value to the region).</p> <p>The vision seeks to reduce specific Carbon Dioxide emissions by 50%. It states this can be achieved by implementing the following:</p> <ul style="list-style-type: none"> • Retro-fitting of advanced supercritical boilers on at the three coal-fired power stations in the Region; • Co-firing 15-20% biomass with coal in these retro-fitted units; • Installing feed-water heating; • Use of CCS on existing power stations in the region; and • New power station build with CCS. <p>For the UK to meet its Energy White Paper CO2 reduction targets and for the region to meet its Vision for a low carbon future then CCS is a pre-requisite. The Yorkshire and Humber region is ideally located geographically to capitalise on the CCS opportunity. It has major point sources of CO2 production at its three flagship coal-fired power stations. These sources are quite close together and also adjacent to potential CO2 storage sites in the southern North Sea.</p> <p>Cleaner coal technologies (CCTs) are available now that can significantly reduce specific CO2 emissions from electricity generation. In the longer-term deployment of these technologies in association with carbon dioxide capture and storage (CCS) would enable towards zero emission coal-fired power generation technologies (ZETs).</p>
Transport	<p>The report identifies that a major barrier to increase in coal use could be deficiencies in the transport infrastructure that limit movements of coal from the point of production or import to the power stations. Whilst port capacity for imports of coal and biomass is adequate there are major worries about rail capacity between the ports and the power stations. If the Coal Vision outlined is to be realised then the inevitable increases in transport of imported biomass and coal will further stretch the system.</p>
Domestic	<p>No direct reference.</p>
Industry	<p>The local chemical industry with its associated regional infrastructure could contribute significantly to developing CCS.</p> <p>An ever-increasing share of the region's coal for electricity generation is met by imports. Even if 100% of coal for electricity generation is imported this will not impact on the ability to deliver the Coal Vision. Within the Region UK Coal plc had three operating deep mines at Kellingley, Maltby and Rossington. In addition they had a deep mine, Harworth just outside the Region. UK Coal are planning the imminent mothballing of Harworth colliery and suggest Rossington only has a short-term future.</p> <p>The vision seeks to help maintain an economically viable coal mining industry with the associated socio- economic benefits in terms of employment. It also seeks to help develop Y&H as an energy exporter with associated financial benefits. Direct economic benefits accrue from employment in the coal production, coal transport and coal utilisation (especially electricity generation) industries.</p> <p>The report also identifies longer term actions to help realise the vision and support the coal industry. These include methane recovery from abandoned</p>

Strategy Title	Vision for Coal: Coal vision and action plan for Yorkshire and Humber
	coal mines, and accurate assessment of coal reserves in the region. Target areas could include the North Ouse prospect northwest of York, the Hatfield area and the wider Selby/Snaith area.
Agriculture	No direct reference.
Commerce	The region has the opportunity to develop an assertive relationship with the surface coal extraction industry that ensures maximum economic and social benefit is derived from the recovery of these resources, that during operations environmental impact is kept to a minimum and that post operation remediation and restoration provides lasting benefits to the community.
AREAS OF POTENTIAL ADAPTATION	
Sea Level Rise	No direct reference.
Flooding	No direct reference.
Water Resources	No direct reference.
Agriculture	No direct reference.
Habitat, Biodiversity & Landscape	No direct reference.
Buildings and Construction	No direct reference.
Industry	See section on Industry above
Transport	See section on Transport above
How does this strategy contribute to the long term reduction of GHG Emissions?	In the long term the vision seeks to reduce specific CO2 emissions from coal-fired electricity generation by the deployment of Clean Coal Technologies (CCTs). This means that specific carbon dioxide emissions would be only about 10% of those associated with currently operating coal-fired power stations. The vision looks to make energy production cleaner.
How does this strategy contribute to the delivery of adaptation actions?	The document focuses on technology to continue to generate energy from fossil fuels rather than addressing adaptation measures around demand reduction and alternative consumption.

C1.10 Yorkshire and Humber Regional Energy Strategy and Action Plan

Strategy Title	Regional Energy Strategy and Action Plan
Originator	Yorkshire and Humber Regional Energy Forum (using consultants: Sustainable Energy Solutions and Consultation With A Purpose)
Published Date	6 April 2006
Target Area	Yorkshire and Humber Region
Statutory or Non Statutory?	The principal statutory driver for Energy Policy in the UK and, therefore, the region is the Energy White Paper. The region has responded to the goals and targets laid out by this and other government documents, such as the UK Fuel Poverty Strategy and the Renewables Obligation, to develop a suite of targets that relate directly to energy in the region. These targets are communicated in a number of statutory documents, such as, the Regional Spatial Strategy and the Regional Economic Strategy. The Regional Energy Strategy and Action Plan provides the framework within which these targets are set.
How the Strategy is Prepared?	<p>The strategy was completed by Sustainable Energy Solutions and Consultation With A Purpose consultants on behalf of the Yorkshire and Humber Assembly – Regional Energy Forum.</p> <p>The strategy combines a review of national and regional strategies and policies, energy market drivers and consultation with internal and external stakeholders. A group of stakeholders were interviewed to ensure the regional perspective was understood and the whole energy profile was engaged. The stakeholders were specifically selected to ensure the issues covered all aspects of energy, from fuel suppliers to energy suppliers and the infrastructure that supports it.</p>
Decision Making Processes	<p>The document is used by the Regional Energy Forum (REF) to set the framework for policy and targets for integrated energy generation within the region.</p> <p>It was agreed by all those involved in the consultation, that achievable measurable goals should be set and reviewed by the REF to ensure the region is on target.</p>
Purpose and Aims of the Strategy	<p>The vision for the Regional Energy Strategy up to 2020: "Yorkshire and Humber will continue to be a primary energy provider for the UK while achieving low carbon energy targets".</p> <p>Three key objectives support the attainment of this Vision:</p> <ul style="list-style-type: none"> • Maximise low carbon energy generation. • Promote the reduction in energy demand. • Lead the way in delivering secure regional and national energy supplies. <p>The key objectives of the strategy are to:</p> <ul style="list-style-type: none"> • Lead the way in delivering secure regional and national energy supplies. • Work towards the development of a balanced energy portfolio for the region; • Reinforce the energy supply chain infrastructure (transport/fuel-resource) and grid connectivity in an integrated manner; and

Strategy Title	Regional Energy Strategy and Action Plan
	<ul style="list-style-type: none"> • Facilitate skill growth in the energy sector and energy technology areas. • Promote the reduction in energy demand. • Identify opportunities for increased energy efficiency for generation and transmission. • Maximise low carbon energy generation. • Work towards GHG emissions targets. <p>The actions from the strategy will:</p> <ul style="list-style-type: none"> • Benefit the regions economy; • Support the regions communities; and • Protect and enhance the regions environment.
SECTORS THAT IMPACT ON GREENHOUSE GAS EMISSIONS	
Power Generation	<p>Yorkshire and Humber presently contributes 17-18% of the UK's energy production while consuming 7-8%. Power generation contributes approximately 55% of the region's GHG emissions. It is by far the largest contributor and represents the most significant opportunity for emissions reductions and the attainment of the targets. However as 50-60% of energy generated in the region is exported, regional emission levels are seriously impacted by demand from other regions.</p> <p>For the number of large scale projects to increase and for security of supply within the existing mix of energy production there will be a requirement to; a) upgrade the grid and supply infrastructure, and b) provide more localised energy production that limits, if not eliminates, the demands on the grid. The grid infrastructure is believed to be a major obstacle to developing larger scale Renewable energy technologies in the region, as the 33kVA grid is a weak point that adds large costs to many schemes.</p> <p>In effectively implementing this action plan the primary developments the strategy focuses on are:</p> <ul style="list-style-type: none"> • Clean coal power stations through the adoption of Carbon Capture and Storage technology and the delivery of advanced supercritical boiler systems; • An extensive regional bio energy infrastructure that includes biomass and bio fuels; • Widespread use of Combined Heating and Power in both new developments and refurbishments; • Micro-generation for electricity and heat, mainstreamed throughout our communities and built environments; and • Energy from Waste integrated as part of recycle-reuse-remanufacture centres. <p>One opportunity for the region is the change in coal-fired energy production. This is expected to be less volatile as the region pursues a positive coal vision. The region can benefit from opportunities presented by a national commitment to Carbon Capture Storage (CCS) technology and the region's</p>

Strategy Title	Regional Energy Strategy and Action Plan
	<p>proximity to potential carbon storage sites in the North Sea.</p> <p>From a new technology perspective, CCS offers the most significant medium and long-term opportunity to reduce emissions. This technology is still in development for coal-fired generation and is not anticipated to reach maturity until beyond 2010. If widespread inclusion of CCS technology in coal-fired generation can be achieved by 2020, CO2 emissions can be reduced by as much as 90%, thereby reducing regional emissions by 45-50%. However, greater reductions can be achieved by applying the technology in other large industrial GHG producers once the technology is proven.</p> <p>The strategy provides a breakdown of Local Authority Renewable energy targets for 2010/2020 The totals are 708MW/1820MW of which:</p> <ul style="list-style-type: none"> • Humber 124MW/350MW, • North Yorkshire 209MW/350MW, • South Yorkshire 47MW/160MW, • West Yorkshire 88MW/270MW, • Other 240MW/690MW. <p>The region's target for CHP has been exceeded based upon a single site – ConocoPhillips plant at Immingham. The region should seek to develop more CHP sites leveraging this success in moving the region forward to reduce primary energy demand from large developments.</p> <p>Development of a bio fuel depot in the South Humber side area is also taking place however, national and EU targets have not been reflected regionally. The region has an excellent opportunity to continue the development of a bio fuels industry in parallel to mineral fuels.</p> <p>The strategy highlights the market status for wind farm developments is somewhat precarious in the short-term. This can be attributed to issues of grid connection, financial feasibility, planning consent, public acceptance constraints and the time-lag associated with dealing with these issues. All of these factors represent a considerable problem for the achievement of regional targets for Renewable Energy through wind. The existing regional target is 354MW by 2010, the present position is approximately 26MW installed with approximately a further 110MW consented.</p> <p>The strategy states the importance of considering Energy from Waste without undermining the regional stance of not supporting mass burning of waste. It is estimated that approximately 2% of the region's total energy could come from the bio-fraction of waste. This equates to a 25% reduction of the bio-fraction from waste going to landfill. Technological advances in thermal transfer, such as, gasification and pyrolysis, should make this option less risky and more palatable, especially if it is combined with recycling and remanufacturing facilities.</p> <p>One of the strategies key actions is expansion of the region's capacity to deliver biomass fuel as a co-firing source. Co-firing of biomass within coal-fired generation facilities is still seen as an important route to carbon reduction</p> <p>Energy efficiency and micro-generation are increasingly recognised as major contributors to achieving the goals of the Energy White Paper. The promotion and support of a 10% increasing to 30% staged target mechanism</p>

Strategy Title	Regional Energy Strategy and Action Plan
	for onsite Renewable targets through the RSS, LDF's and within public and non-public sectors will clearly play a significant part in achieving the Renewable energy and emission reduction targets.
Transport	The region presently refines approximately 25-30% of the UK's mineral fuels. To maintain this strong association with transport fuels, there is an opportunity for the region to link this expertise with the production of bio fuels.
Domestic	No direct reference.
Industry	High concentration of transport fuel producers are located in South Humber; this represents an opportunity to create a Biofuels Hub that connects the skills, technology and R & D facilities in close proximity to existing oil refinery facilities.
Agriculture	There is an opportunity for the region to develop its rural economy and supply chain infrastructure to ensure more indigenous feedstock is available. Significant steps would be through a robust strategy for biomass that includes the development of a significant sized wood pellet mill within the region and greater wood chipping, storage and handling facilities.
Commerce	The strategy identifies that a greater mix of Renewable Energy sources is required and can be delivered through a more integrated approach to the development of the Renewable Energy market. Given the strong manufacturing skills base and diverse university sectors, the region is well placed to provide a core for those looking to research, develop and manufacture in the UK and European markets with Renewable products. Actions to attract a major turbine manufacturer and small-scale wind turbine manufacturer(s) to the region will not only act to shorten the supply chain but will contribute to regional economic growth and enhance understanding of the wind energy sector.
AREAS OF POTENTIAL ADAPTATION	
Sea Level Rise	No direct reference.
Flooding	No direct reference.
Water Resources	No direct reference.
Agriculture	See section on agriculture above.
Habitat, Biodiversity & Landscape	No direct reference.
Buildings and Construction	There are not enough zero emissions developments coming forward in the region. As the RES and RSS look to develop sustainable communities, there also needs to be more emphasis at providing energy to these communities from a zero emissions perspective. While new buildings are being targeted with BREEAM and EcoHomes rates of Excellent, there are few similar targets for the region's refurbishments.
Industry	See section on industry above.
Transport	See section on transport above.
How does this strategy contribute to the long	While the region sets and aspires to emission reduction targets of 20% by 2010, it should be recognised that the majority of emissions from energy

Strategy Title	Regional Energy Strategy and Action Plan
<p>term reduction of GHG Emissions?</p>	<p>production (contributes 55% to regional emissions) are not a function of regional demand. Therefore, the attainment of emission targets is not under the full control of the region. To achieve regional goals, requires similar commitments from the source of the demand, which, in turn, requires cross-border collaboration. In order to assist this process the region needs to lobby the UK government in order to raise awareness of this issue and engender a common approach to the achievement of regional goals that, ultimately, achieve national goals.</p>
<p>How does this strategy contribute to the delivery of adaptation actions?</p>	

C1.11 Yorkshire and Humber Regional Environmental Enhancement Strategy

Strategy Title	The Regional Environmental Enhancement Strategy
Originator	Yorkshire and Humber Regional Environment Forum
Published Date	September 2003
Target Area	Yorkshire and Humber Region
Statutory or Non Statutory?	The need for a Regional Environmental Enhancement Strategy emerged from the production of the Regional Sustainable Development Framework (RSDF, 2000). The Enhancement Strategy is non-statutory, but has important functions in enabling the region to progress towards sustainability. As such, the Strategy's main role on the regional policy stage is to channel environmental context and expertise into the policy and decision-making processes for the 'high level' strategies, in particular RSS and RES.
How the Strategy is Prepared?	Aim 12 of the Regional Sustainable Development Framework, 'a biodiverse and attractive natural environment' identified the production of the Environmental Enhancement Strategy as a key action. Yorkshire and Humber Regional Environment Forum prepared the strategy but widened the remit of the Strategy beyond Aim 12 of the RSDF to promote environmental enhancement as both a policy objective and a delivery mechanism across all aspects of the RSDF, and to integrate fully with the region's economic and social agendas.
Decision Making Processes	As the Enhancement Strategy is non-statutory its implementation is dependent on its relevance and its ability to motivate, and it must be seen as the beginning of a process, rather than the culmination. Real environmental expertise in the region is to be found throughout local communities, and creating new opportunities for that local knowledge to shape regional decisions is one of the functions of the Strategy. Many of the Strategy's objectives can partly be achieved through improving and enforcing existing regulatory processes that are managed by statutory organisations. By fully engaging those organisations the Strategy has potential to influence changes to legislative and statutory frameworks at regional level and beyond. The Enhancement Strategy has several audiences: <ul style="list-style-type: none"> • Regional decision-makers - chiefly the Yorkshire & Humber Assembly (Y&HA), Yorkshire Forward (the Regional Development Agency) and Government Office for Yorkshire & the Humber (GOYH), indicating how developments and funding programmes can be shaped for optimum environmental benefit; • Local authority decision-makers, to highlight opportunities to enhance their contribution to the environmental quality of the region; • The many statutory and voluntary environmental organisations within the region, to provide a collective purpose and a focus for networking and collaboration on shared priorities; and • Businesses and local communities, to give them greater insight into the region's environmental agenda, especially opportunities to share best practice and capitalise on the value of environmental enhancement to their activities.

Strategy Title	The Regional Environmental Enhancement Strategy
<p>Purpose and Aims of the Strategy</p>	<p>The strategy presents 5-10 year plan of regional objectives for environmental enhancement arranged within four themes alongside a set of practical, 2-5 year actions.</p> <p>The Strategy has several roles:</p> <ul style="list-style-type: none"> • An advocacy role, providing a regionally agreed context for promoting environmental issues; • A technical role, creating a channel for environmental expertise in the region, to raise knowledge and public understanding of environmental issues, improve decision-making and community participation; and • An implementation role, giving guidance and support to influence how regionally available funds for environmental enhancements are deployed. <p>This strategy identifies the regions’ ability to enhance its environment as a key test of sustainable development.</p> <p>The Enhancement Strategy will help the Region to build the technical knowledge, experiment with possible solutions and foster public and political awareness to ensure that environmental enhancement – and replenishment – is recognised as a social and economic imperative.</p> <p>The Enhancement Strategy aims to reinforce the RSDF by considering the same cross-cutting themes. In order to contribute to sustainable development, the whole Enhancement Strategy aims to:</p> <ul style="list-style-type: none"> • Develop activities that address climate change; and • Increase the opportunity and capacity for all organisations and individuals to participate in enhancing the environment in socially and economically fulfilling ways. <p>The strategy has four themes, each with a vision for the region:</p> <ol style="list-style-type: none"> 1. Building knowledge and understanding; 2. Conserving environmental resources, even very radical moves towards sustainable processes there will not be any net environmental benefit unless resources are better managed and consumption is reduced. The strategic objectives seeks to reduce the global environmental footprint of the region; 3. Managing environmental change; and 4. Making community connections. <p>The strategic actions relate to enhancing awareness, participation, decision-making or resource efficiency. They physical enhancement projects cover:</p> <ul style="list-style-type: none"> • Enhancement through Regeneration; • River Catchment Projects Network; • Strategic Green Networks project.
<p>SECTORS THAT IMPACT ON GREENHOUSE GAS EMISSIONS</p>	
<p>Power Generation</p>	<p>The strategy recommends achieving net reductions for consumption rates in energy through rigorous application of an energy hierarchy to reduce overall consumption and to transfer to renewable sources.</p>

Strategy Title	The Regional Environmental Enhancement Strategy
Transport	<p>The strategy identifies that provision for leisure and recreation activities near to local communities can reduce the need for car travel and enhance the local environment.</p> <p>Indicators used to measure impact of transport on the environment include:</p> <ul style="list-style-type: none"> • Total Motor Vehicle Km travelled • % of journeys to work by walk/cycle/public transport • Average time taken travelling to work (minutes)
Domestic	<p>Indicators used to measure domestic impact on the environment include Household Waste Arising – kg/person/yr (+%recycled) and % of housing developed on previously used land.</p>
Industry	<p>No direct reference</p>
Agriculture	<p>The strategy identifies the response of agriculture to economic circumstances and climate change results in landscape changes. These changes should be managed with emphasis on optimum environmental outcomes of changes in agriculture and farmland management.</p>
Commerce	<p>The strategy aims to establish Yorkshire and Humber as a region of excellence in resource efficiency where regional suppliers of goods and services adopt new technologies and best practice.</p> <p>It recommends implementing imaginative ways to reshape consumer choice in purchasing of food and other goods, in travel and in domestic energy and water consumption.</p> <p>To manage environmental change and achieve environmental replenishment through urban regeneration, the strategy focuses on:</p> <ul style="list-style-type: none"> • Using derelict and vacant land in appropriate ways; • Enhancing the role of greenspaces, street trees and water courses in the biodiversity and civic amenity of urban areas; and • Make heritage, architecture and public spaces central to regeneration. <p>To make community connections the strategic objective is to engender an approach to tourism, leisure and recreation based on the carrying capacity and character of the regions environment.</p>
AREAS OF POTENTIAL ADAPTATION	
Sea Level Rise	<p>No direct reference.</p>
Flooding	<p>The strategy acknowledges that flood risk could cause changes in landscape so measures such as upland storage of storm water and controlled inundation of some lowland areas are needed.</p> <p>The strategy recommends developing a river catchment projects network to connect local schemes to regional objectives and funding.</p>
Water Resources	<p>The report highlights that river catchments provide a useful organising structure for managing environmental change in an integrated way from uplands, through urban areas to the coast.</p> <p>In order to manage landscape changes the strategy emphasises the sustainable management of water, flood risk and wetland habitats on a</p>

Strategy Title	The Regional Environmental Enhancement Strategy
	catchment-wide basis.
Agriculture	See section on agriculture above
Habitat, Biodiversity & Landscape	<p>In seeking to conserve environmental resources the strategy recommends making radical improvements in resource efficiency in ways that achieve the best possible outcomes for the environment. The underlying principle of this is conservation.</p> <p>In order to manage environmental change the strategy seeks to take every opportunity to enhance its environmental wealth. This includes replenishing environmental assets and reduction and mitigation against damage that is still ongoing.</p> <p>The objectives to achieve this vision include reducing all forms of pollution (such as air, noise and light), and creating space and opportunity for natural habitats to recover, adapt and grow.</p> <p>The report identifies the need for a plan that will give a regional spatial expression for how Local Biodiversity Action Plans can be best delivered on the ground. This includes mapping of existing and potential new sites for native habitats, especially those prioritised by the Local Biodiversity Action Plans.</p> <p>Greenspace, especially in urban areas provides one of the best means of enhancing peoples contact with the natural environment. Green networks allow movement through the urban area on foot or cycle in close contact with nature. Green networks help absorb noise and atmospheric pollution. They enable education and have direct health benefits, they also allow habitats to expand, link together and be more adaptable to change.</p>
Buildings and Construction	<p>To manage environmental change the strategy promotes sustainable design, construction and drainage throughout urban areas.</p> <p>To manage landscape change the strategy places emphasis on local character and distinctiveness in the built and natural environment.</p>
Industry	No direct reference.
Transport	See section on transport above
How does this strategy contribute to the long term reduction of GHG Emissions?	This strategy is visionary and emphasises the importance of delivering other regional strategies. It stages what we should be aiming towards, however appears weak on action and implementation.
How does this strategy contribute to the delivery of adaptation actions?	

C1.12 Yorkshire and Humber Farming and Food Framework

Strategy Title	Farming and Food: A Framework For Change
Originator	Yorkshire Forward / GOYH
Published Date	July 2003
Target Area	Yorkshire and Humber Region
Statutory or Non Statutory?	This is a non-statutory document and forms the Regional response and Delivery Plan for Implementing Defra's Strategy for Sustainable Farming and Food (SSFF).
How the Strategy is Prepared?	<p>Preparation of the Framework was led by Yorkshire Forward and GOYH. The Plan was produced by regional stakeholders, representing the farming, food, health and environment sectors. To inform production of the Delivery Plan, baseline research was commissioned into elements of the region's farming and food sectors.</p> <p>There is considerable activity already underway within the region that contributes to delivering SSFFs objectives. This work has been acknowledged in drawing up the Plan.</p> <p>A summary of the Regional Delivery Plan was endorsed by the Yorkshire and The Humber Rural Affairs Forum in June 2003.</p>
Decision Making Processes	<p>This Regional Delivery Plan identifies elements of the SSFF which stakeholders in Yorkshire and The Humber consider the highest priority and feel strongly placed to deliver.</p> <p>The Region put in place a Farming and Food 'Board' in 2003 with a private sector 'Champion'. Their role is to oversee effective implementation of the Regional Delivery Plan and review priorities. They also ensure alignment with the region's key strategies. The plan is not funding-led, however the Board will look to facilitate and coordinate funding where it is needed to deliver priorities.</p> <p>The Farming and Food 'Board' monitors progress on the implementation of the Regional Delivery Plan. It provides an annual report on progress to the Yorkshire and The Humber Rural Affairs Forum.</p>
Purpose and Aims of the Strategy	<p>The document seeks to set out how Yorkshire and The Humber can secure a sustainable future for farming and food industries. The report sets out the Framework for regional delivery of Defra's Strategy for Sustainable Farming and Food (SSFF).</p> <p>The Plan is about initiating a fundamental change process in the food and farming industry. Without such a change the industry will continue to decline. The Plan seeks to reconnect the food and farming industry with consumers, the environment and the wider community.</p> <p>The Humber is determined to pick up the key challenges laid down by Government:</p> <ul style="list-style-type: none"> • Reconnection between producers and customers • Collaboration between producers and along the supply chain • Sustainable farming systems – profitable & competitive • Deliver environmental enhancement and reduce pollution

Strategy Title	Farming and Food: A Framework For Change
	<ul style="list-style-type: none"> • Investing in the future. <p>The strategy includes several visions relating to farming, food, the environment and health.</p> <p><u>Farming Vision</u></p> <ol style="list-style-type: none"> 1. The region’s farming businesses will have become more dynamic, mixing sustainable farming, land management, and alternative enterprise to meet changing needs. 2. There will be an environment for change. This will encourage entrepreneurship, and collaboration in all business activity, which will be market focused. Increased skill levels will ensure that the region’s farms compete successfully in the market place. <p><u>Food Vision</u></p> <ol style="list-style-type: none"> 1. To create precedence where produce from the region is the first choice for all, providing safe, quality and healthy food from a profitable and sustainable sector. 2. To have persuaded the buying public that best value should also represent a truly sustainable choice for the region. <p><u>Environment Vision</u></p> <ol style="list-style-type: none"> 1. Every farmer in Yorkshire and The Humber will have a statement, for the area in which their farming unit sits. It will provide them with a clear view about the environmental objectives for their local landscape, including its built, historic and ecological heritage interest. This will provide a vision about how it should look, how they can manage it to maintain and enhance its interest and where and how they can apply for appropriate funding. 2. There will be an extensive network of ‘joined-up’ advice available from organisations and individuals that will support them in the achievement of these goals. <p><u>Healthy Communities Vision</u></p> <ol style="list-style-type: none"> 1. To have strong, thriving, healthy, sustainable and active rural communities across Yorkshire and The Humber Region. 2. To improve the health and well-being of communities, reduce health inequalities, stress and suicide rates. Key elements include promoting healthier lifestyles, tackling the root causes of ill health and inequalities and promoting healthier eating. <p>The challenge is to aggressively market food production to the regional population. This will involve collaboration at many levels. The challenge is to persuade the buying public that Yorkshire produce is the best value and represents a truly sustainable choice.</p>
SECTORS THAT IMPACT ON GREENHOUSE GAS EMISSIONS	
Power Generation	<p>The Frameworks actions and targets for non food crops are:</p> <ul style="list-style-type: none"> • A working biomass fuelled CHP plant. • Public sector funded Capital Grant Scheme for CHP and Biomass (e.g. woodchip boilers.) • Established market for biomass produce.

Strategy Title	Farming and Food: A Framework For Change
Transport	This is not referenced in the Framework directly however it does encourage farms to use the region’s transport connections to take advantage of the urban conurbations as potential markets for Yorkshire produce.
Domestic	This is not directly referenced in the Framework, however it relates to the healthy communities vision and localised supply chains.
Industry	Yorkshire and The Humber is one of the UK’s main food producing regions with over 1,100 food and drink processing companies based in the region. The region accounts for 12% of the UK’s total employment in the food and drink industry, the second highest concentration of employment outside of the South East (including London).
Agriculture	<p>In the Region over three-quarters of the land is managed by agriculture. 27% of the region’s land is subject to national landscape and nature conservation designations.</p> <p>In terms of farming, there is an onward move to larger specialised farm units, particularly in the dairy and pig sector. There are advantages in the Region in terms of location, soil fertility, rail and road networks and the close proximity to several large urban conurbations which are potentially the markets for much of food production.</p> <p>There is a growing interest in organic production, but it is currently at a relatively low level and is not branded regionally.</p> <p>The Framework details a number of actions and targets to deliver the vision for farming, food, the environment and health. These are:</p> <ul style="list-style-type: none"> • The region should establish a network of “leading edge” demonstration farms, reflecting the broad range of farm types across the region. • The industry needs a first stop shop to interface with all rural support services. • Establish an accurate picture of Local Food activity in Y&H on which to target support through a robust network. • Give a strategic steer to Local Food activity to maximise benefits to those in the sector. • Yorkshire Organic Centre (YOC) to develop a Regional Organic Development Plan (including Communications activity) in partnership with national work of Food Chain Centre and Soil Association. • Develop and co-ordinate the idea of a Farmers Market ‘hub’ in the Region. • Make agri-environment schemes relevant to the individual farm and area, by involving farmers and those with local knowledge in their design. • Provide farmers with a vision for their local landscape. • A set of specific environmental information available for Yorkshire – to support environmentally sustainable land management. • Deliver national health strategies within the region

Strategy Title	Farming and Food: A Framework For Change
	<ul style="list-style-type: none"> Develop and fund regional food and health framework for action.
Commerce	<p>This is not specifically referenced in the Framework however some of the actions and targets detailed in the agriculture sector relate to commerce. This includes:</p> <ul style="list-style-type: none"> Farming is fundamental to the health of the rural economy and that the rural economy is vital to wider economic activity. There is continued heavy investment in the rural economy via CAP payments, but with little apparent sustainable benefit to farmers or others. Establish a strong Yorkshire Food Brand to strategically promote the Region's food production. This must be supported by sustainable consumption and procurement. In tandem establish current level of local public procurement and look for best practice. Maximise the use of Local Food in benefiting tourism related retail and catering.
AREAS OF POTENTIAL ADAPTATION	
Sea Level Rise	No direct reference
Flooding	The Frameworks action for flood risk is for pollution and flood management to be built into whole farm audits and area initiatives.
Water Resources	No direct reference
Agriculture	See section on agriculture above
Habitat, Biodiversity & Landscape	<p><u>Environment Vision</u></p> <ol style="list-style-type: none"> Every farmer in Yorkshire and The Humber will have a statement, for the area in which their farming unit sits. It will provide them with a clear view about the environmental objectives for their local landscape, including its built, historic and ecological heritage interest. This will provide a vision about how it should look, how they can manage it to maintain and enhance its interest and where and how they can apply for appropriate funding. There will be an extensive network of 'joined-up' advice available from organisations and individuals that will support them in the achievement of these goals.
Buildings and Construction	No direct reference
Industry	Yorkshire and The Humber is one of the UK's main food producing regions with over 1,100 food and drink processing companies based in the region. The region accounts for 12% of the UK's total employment in the food and drink industry, the second highest concentration of employment outside of the South East (including London).
Transport	This is not referenced in the Framework directly however it does encourage farms to use the region's transport connections to take advantage of the urban conurbations as potential markets for Yorkshire produce.

Strategy Title	Farming and Food: A Framework For Change
How does this strategy contribute to the long term reduction of GHG Emissions?	The Framework seeks to promote the value of local produce and the 'Yorkshire Brand', and increase awareness of agricultures impact on the environment. However, larger specialised farms may in themselves have a larger carbon footprint.
How does this strategy contribute to the delivery of adaptation actions?	It does not consider diversification and alternative uses of land if climate change means land is no longer feasible to farm. It also does not consider alternative types of crops or potential for aspects such as soil conditions and water availability to change as a result of climate change.

C1.13 Yorkshire and Humber Regional Forestry Strategy

Strategy Title	Regional Forestry Strategy
Originator	Government Office of Yorkshire and Humber
Published Date	July 2005
Target Area	Yorkshire and Humber Region
Statutory or Non Statutory?	This is a non-statutory document that originates from the need for a regional strategy that marries national objectives with local aspirations.
How the Strategy is Prepared?	<p>The process has been overseen by a Steering Group which is chaired by the Government Office Rural Director and includes representatives from the Yorkshire and Humber Assembly, Yorkshire Forward, the Countryside Agency and the Forestry Commission. It has also been supported by a Regional Woodland Forum.</p> <p>In July 2004, a draft Regional Forestry Strategy "Trees and Our Changing Region" was published for consultation. By November 2004, over 170 responses had been received.</p> <p>The feedback from this public consultation exercise was considered by the Regional Woodland Forum and the resulting modified strategy was approved by the Steering Group and then formally endorsed by both the Regional Assembly and Yorkshire Forward. The strategy was published under the title: "The Value of Trees in Our Changing Region" and was formally launched by the Forestry Commission's Director England at an event in York on July 1 2005.</p>
Decision Making Processes	<p>The Strategic Framework advocates an inclusive, co-ordinated and partnership approach to the delivery of its aims and objectives. It defines a common agenda that will contribute to many of the emerging regional policies in areas like the economy, spatial planning and sustainable communities.</p> <p>Two key objectives of the strategy are:</p> <ul style="list-style-type: none"> • Partnership Working – to ensure that lessons are learned and examples of best practice from within and outside the region are shared. • Regional Co-ordination – to ensure that all agencies and organisations who have an interest in the region's trees and woodlands are committed to the aims and objectives of the strategy <p>In particular this strategy seeks to identify what the important issues and opportunities are for our region's trees and woodlands so that policies such as the Regional Spatial Strategy and Regional Economic Strategy adequately reflect and benefit from them.</p>
Purpose and Aims of the Strategy	<p>The strategy is set out in two documents- "The Strategic Framework for Trees, Wood and Forests" and "The Outline Action Plan". The Strategic Framework shapes decisions about the regional tree and woodland resource through to the year 2020, with interim reviews taking place at approximately five year intervals. The Outline Action Plan is expected to evolve and develop during the early years of delivery and it is intended to review progress and publish a monitoring report and revised action plan at approximately two yearly intervals.</p> <p>The aims of the strategy include the need to:</p>

Strategy Title	Regional Forestry Strategy
	<ul style="list-style-type: none"> • Improve knowledge and understanding about the value of trees and woodlands amongst the region’s policy makers and decision takers; • Improve skills and business expertise within the forestry sector; • Increase woodland creation in the reclamation of derelict and underused land; • Protect and improve woodland Sites of Special Scientific Interest and Ancient Woodlands; • Increase accessible woodland near to where people live; • Increase the use of wood in sustainable construction and as a source of renewable energy; • Increase tree and woodland planting to help reduce flood risk. <p>The strategy also promotes the following guiding principles:</p> <ul style="list-style-type: none"> • Guiding Principle 1 – a high priority is given to the management and protection of the region’s existing trees and woodlands. • Guiding Principle 2 – to increase progressively the overall tree and woodland cover in the region but to prioritise new planting in areas where the maximum public benefit can be achieved. • Guiding Principle 3 – the overall integrity, character and quality of the region’s landscapes are actively maintained and enhanced by new tree planting and woodland management. • Guiding Principle 4 – design and implementation of all new tree and woodland planting or management schemes will adhere to published industry best practice. • Guiding Principle 5 – the historic environment is appropriately assessed, and historic assets are identified, conserved and enhanced as appropriate as part of any new tree and woodland planting or management scheme. • Guiding Principle 6 – cultural identity and sense of place are given appropriate weight and consideration in any new tree and woodland planting or management schemes. • Guiding Principle 7 – all new tree and woodland planting or management schemes will be consistent with and further the established priorities for protected sites and designated landscapes.
SECTORS THAT IMPACT ON GREENHOUSE GAS EMISSIONS	
Power Generation	<p>The major power generators are increasingly looking for co-firing material in order to meet their Renewables Obligations. Although much of this material will come from biomass crops, there is potential for a significant proportion to be generated through the sustainable management of new and existing woodlands.</p> <p>The strategy identifies the potential of wood as a source of renewable energy – woodfuel, including short rotation coppice, replacing fossil fuels as a</p>

Strategy Title	Regional Forestry Strategy
	<p>source of energy reduces net greenhouse gas emissions if the trees are replanted thus helping the region move towards a low carbon economy.</p>
Transport	<p>A significant proportion of the country's timber is imported through the Humber ports but most is then transported to processing plants outside the region. The presence of this large volume of timber passing through the region presents a specific opportunity for processing capacity to be developed near the ports, adding value within the region and potentially providing a market for regionally grown timber in the future.</p> <p>Significant planting has taken place alongside both the new A1/M1 link-motorway in West Yorkshire, and the Leeds-York mainline railway to reduce the noise, pollution and visual intrusion of these major transport routes. It is important that initiatives like these continue. Not only do they transform the local landscape, they also help to develop new woodlands in some of the areas of greatest need.</p>
Domestic	<p>No direct reference.</p>
Industry	<p>Potential timber production within the region is increasing but currently most of this is exported outside the region for processing. The fluctuating price of timber has served to increase the volume of wood and wood products coming in through the Humber ports but, again, most of this is also then transported out of the region for processing.</p> <p>Timber production in the region stands at 270,000m³ a year and has the potential to increase to 340,000m³ a year. In 2001/02 the forestry sector supported approximately 320 businesses and over 1840 jobs. The non-market benefits of our trees and woodlands are estimated to contribute over £80m a year to the region's economy.</p> <p>Much of the extensive coniferous forests in the region are located in and around the North York Moors. There is limited softwood sawmilling and processing capacity locally and much of the timber produced has to be transported to markets outside the region. Not only does this mean the potential to add value to this growing timber resource is lost, but the relative isolation of the plantations and the limited road infrastructure in the area means costs are relatively high and the net value of standing timber is relatively low. Nevertheless, because the majority of the region's conifer forests were planted after 1950, regional production of timber has not yet reached its peak. Over the next 20 years the potential production of softwood will increase to around 340,000m³ a year, presenting a significant economic opportunity in some of the less prosperous rural areas.</p> <p>The recent decline in timber prices has undermined the financial viability of many of the region's established forestry businesses. This has serious implications for the region's ability to continue to sustainably manage the tree and woodland resource and maximise their value in the future.</p>
Agriculture	<p>The Strategic Framework highlights the relatively low woodland cover across the region and the limited knowledge we have about that tree and woodland resource. In terms of woodland cover the Region contains over 90,000 hectares of woodland and over 2 million individual trees. Average woodland cover stands at 5.8%, and ranges from 13.6% in Ryedale to 0.3% in Hull. The European average is over 30%, and the figure for England currently stands at 8.4%.</p>

Strategy Title	Regional Forestry Strategy
	<p>However there are opportunities in the region, woodland creation is playing a significant part in the reclamation of former colliery sites in South Yorkshire</p> <p>One of the aims of the strategy is to enable a sustainably managed regional tree and woodland resource supporting the retention and development of a viable and vibrant forestry sector, and contributing to the overall sustainable development of the region.</p> <p>In order to achieve this the strategy identifies the following objectives:</p> <ul style="list-style-type: none"> • Forest and Wood Products – to build on the regional strengths and encourage the continued development of an active market for both traditional and innovative forest products in order to contribute fully to the economic prosperity of the region. • Support Mechanisms – to ensure that support mechanisms are in place in order to maintain a resilient and innovative forest industry sector <p>The other opportunities for woodland are identified as follows:</p> <ul style="list-style-type: none"> • Woodland for carbon sequestration –the volume of carbon stored can be influenced by woodland management practices. Although the carbon stored in the country’s entire forest estate is only equivalent to one year’s carbon emissions, it is recognised that planting trees for carbon sequestration would help buy time while more comprehensive long-term solutions are developed to reduce carbon emissions;
Commerce	<p>Woodland based leisure and recreation is becoming increasingly important, and woodland management for this and other non-timber-related objectives has started to open up new woodland-based employment opportunities.</p> <p>Tourism is an important economic driver in many rural areas and the role of woodlands in supporting the growth of this sector is of increasing importance in areas like the region’s three National Parks and four Areas of Outstanding Natural Beauty.</p> <p>In the more urban and industrial areas of the region there is increasing recognition that a well-treed, attractive environment is imperative if the region is to compete successfully for inward investment.</p> <p>The strategies aim is to utilise the many environmental strengths of trees and woodlands to underpin the economic and social renaissance of the region. This will be achieved by creating:</p> <ul style="list-style-type: none"> • Attractive Environments for Economic and Social Benefit – to enhance the setting for investment and community regeneration within the region through enhancing the environments where people live and work. • Attractive Environments for Leisure, Recreation and Tourism – to enhance the landscape of the region and provide attractive settings for leisure, recreation and tourism.
AREAS OF POTENTIAL ADAPTATION	
Sea Level Rise	No direct reference.
Flooding	Trees and woodlands offer potential benefits in helping to reduce flood risk across the region by reducing rainfall run-off in the upper catchments, and helping to slow the passage of flood peaks as they move downstream.

Strategy Title	Regional Forestry Strategy
	<p>The strategy proposes using woodland as a means of alleviating the threat of flooding. Trees can reduce the speed of rainfall run-off in both river catchments and urban areas through increasing rainfall interception and enhancing storage capacity in soils. Woodland can also increase the flood storage capacity of floodplains and slow down the passage of flood flows as they move downstream, as well as helping to reduce river sediment loads in areas vulnerable to soil erosion.</p> <p>If modelled at the catchment scale to ensure that flooding and other problems are not merely displaced, trees and woodlands have the potential to reduce our reliance on expensive, engineered flood defences. The potential role of trees and woodlands in helping to reduce flood risk within the region will be examined in detail through the Environment Agency's Catchment Flood Management Planning process.</p>
Water Resources	<p>Trees and woodlands can manage water supplies and increase the rate at which water percolates into the ground when compared to most other land uses. Appropriate woodland planting could potentially have a positive effect on groundwater recharge on the chalk soils in the east of the region where water supplies are already under threat. By contrast, research suggests there can be a negative impact from woodland planting on sandy soils, and short rotation coppice of willow or poplar on wet soils has been demonstrated to reduce water yields by 50% or more. Therefore, any reasonably large scale planting in areas where groundwater resources are limited will need to be undertaken in accordance with the Environment Agency's Catchment Abstraction Management Strategies.</p>
Agriculture	<p>See section on agriculture above. In summary the Framework encourages diversification into forestry related activities.</p>
Habitat, Biodiversity & Landscape	<p>Approximately 27% of the region is designated for its national landscape value, the highest of any region in England, including all or part of three National Parks and four Areas of Outstanding Natural Beauty. Also, approximately 11% of the region is designated as Sites of Special Scientific Interest, the majority of which are proposed or already support international designation. In addition, many more of our region's trees and woodlands are protected by Tree Preservation Orders, or designated as Sites of Scientific Interest or Local Nature Reserves.</p> <p>In the Yorkshire and Humber region, 3783ha of woodland are designated as SSSI. Over a quarter of our woodlands are designated as Ancient Woodlands, but that percentage rises to over 50% in parts of West and South Yorkshire.</p> <p>As at the end of 2004 77% was in favourable or recovering condition, the remainder being assessed as unfavourable.</p> <p>The region's mixed progress in delivering the woodland related targets of the England Biodiversity Strategy. While woodland bird populations are increasing nearly a quarter of woodland Sites of Special Scientific Interest are in unfavourable condition and we continue to suffer losses of our irreplaceable Ancient Trees and Woodlands.</p> <p>By 2080 summer temperatures are predicted to increase by 4°C, summer rainfall to decrease by 60%, and winter rainfall to increase by 30%. This rate of change poses a serious threat to our trees and woodlands, and to the</p>

Strategy Title	Regional Forestry Strategy
	<p>wildlife that depends on them.</p> <p>The strategy aims to ensure that transformation and expansion of the region’s tree and woodland resource takes account of and respects the historic, natural and cultural identity of the region while contributing positively to its economic, environmental and social development and regeneration.</p> <p>In order to achieve maximum biodiversity gain for the region through appropriate tree and woodland planting and management that takes account of the needs of all species and habitats, the strategy has the following objectives:</p> <ul style="list-style-type: none"> • Ancient and Native Trees and Woodland – to secure the ecological sustainability of the region’s existing tree and woodland resource. • Regional Biodiversity – to ensure that tree and woodland planting and management makes a positive contribution to the overall biodiversity of the region. • Habitat changes – as the climate changes so existing ecosystems will come under increasing threat from rising temperatures and changing rainfall patterns. Larger woodlands and woodland networks, linked to other semi-natural habitats, will provide the best opportunities for wildlife to adjust to the changing ecological landscape by providing a greater diversity of habitats within a relatively sheltered woodland environment; • Pests and diseases – increased storminess and winter flooding together with more frequent summer droughts will increase stress for trees on vulnerable sites and make them more susceptible to attack from pests and diseases. This region is particularly vulnerable to exotic pests and diseases because of the volume of timber imported through the Humber ports; • Species and provenance selection – future tree planting and woodland creation will not only need to consider existing site conditions, but also how those conditions will probably change during the lifetime of the trees being planted. Species and provenance selection will need to change accordingly.
<p>Buildings and Construction</p>	<p>The strategy identifies the importance of trees and woodlands in ameliorating local micro-climates – in addition to the other ‘air conditioning’ benefits from, trees and woodlands can reduce energy consumption in buildings by up to 10% through increasing shade in summer and shelter in winter. These ameliorating effects will become increasingly important as the pace of climate change accelerates.</p> <p>Wood as a sustainable material – it is now recognised that wood is a more sustainable material than concrete, steel and glass because of the much higher greenhouse gas emissions associated with the production and processing of those other materials. However, when wood decays it releases the stored carbon back into the atmosphere as CO2 and it is therefore important to prolong the useful life of wood and wood products by recycling where possible.</p>
<p>Industry</p>	<p>See section on industry above</p>
<p>Transport</p>	<p>See section on transport above</p>

Strategy Title	Regional Forestry Strategy
<p>How does this document /strategy contribute to the long term reduction of GHG Emissions?</p>	<p>Our region is a net exporter of energy because of the concentration of power generation based on the former coalfield areas. It is also particularly vulnerable to some of the consequences of climate change, notably coastal inundation from rising sea levels, and increased risk of flooding from higher winter rainfall. Trees and woodlands can make a valuable contribution to help the region counter these threats, and that contribution is recognised within the region's Climate Change Action Plan.</p> <p>One aim is to help the region combat climate change through maximising the contribution of trees and woodlands. In order to slow the rate of change and contribute to a reduction in the region's net greenhouse gas emissions. The strategy proposes:</p> <ul style="list-style-type: none"> • Increased use of wood and wood biomass as a source of renewable energy • Reduced net greenhouse gas emissions through increased tree and woodland planting for carbon sequestration • Increased levels of carbon stored in the region's trees and woodlands through improved management • Increased use of timber as a sustainable building material • Increased recycling of wood and wood based products
<p>How does this document /strategy contribute to the delivery of adaptation actions?</p>	<p>To help the region adapt more successfully to changing climatic conditions the strategy proposes:</p> <ol style="list-style-type: none"> a) Regional flood risk is reduced through increased woodland creation in river catchments b) Improved sustainability of urban drainage systems through increased tree and woodland planting in the region's towns and cities c) Regional flood risk is reduced through increased woodland creation on floodplains d) Water supplies are better protected through appropriate tree and woodland planting e) Energy consumption in our towns and cities is reduced through the positive micro-climate impacts of increased tree and woodland planting f) Ancient and native woodlands are made more resilient to the impacts of climate change through increased tree and woodland planting to buffer and link vulnerable sites g) The biodiversity of the region is made more resilient to the impacts of climate change through increasing the range of woodland and open ground habitats within a sheltered woodland environment h) The tree and woodland resource is made more resilient to the impacts of climate change through more considered species and provenance selection i) Tree pest and disease problems are maintained at their current low levels through continued effective prevention and control measures

C1.14 Yorkshire and Humber's Climate Change Action Plan

Strategy Title	Your Climate: Yorkshire and Humber's Climate Change Action Plan
Originator	GOYH, Yorkshire Forward and YHA – Climate Change Steering Group
Published Date	2005
Target Area	Yorkshire and Humber Region
Statutory or Non Statutory?	The Climate Change Action Plan is a non-statutory document that originated from the Regional Sustainable Development Framework where regional agencies committed to delivering an action plan.
How the Strategy is Prepared?	<p>In 2004 a scoping study looking at climate change projects in the region was published. The findings from this study were used to guide 5 consultation workshops held between January and February 2004. These workshops, attended by 71 people from 47 organisations, identified key challenges and opportunities for the region and suggested broad work streams that a Climate Change Action Plan should look to influence.</p> <p>In July 2004 the Sustainability Commission approved the establishment of a sub-group to steer the development of the Climate Change Action Plan. Specific input from a number of other organisations was sought to develop specific parts of the climate change action plan. The draft of the Climate Change Action Plan was published for consultation on the 5th January 2005. When the consultation period ended on the 16th February 2005 a total of 47 consultation responses had been received.</p>
Decision Making Processes	<p>The action plan will operate within the major regional strategic and delivery frameworks to identify areas that need strengthening and provide tools to achieve this. It will support a range of public and private sector organisations across the region to raise awareness and stimulate action.</p> <p>In delivering the action plan, emphasis is placed on the social, economic and environmental benefits that will accrue from a managed response. The framework also recognises that factors outside the region's control have an impact on the Region's response to climate change. Therefore implementation of actions prioritises on work to improve what can be directly managed and secondly influences areas outside that sphere.</p> <p>In order to deliver the action plan each steering group member will be required to lead on actions related to their core business. The wider partnership are needed to be actively involved with delivery of specific actions and new resources identified within the next two years to broaden the scope of the action plan.</p> <p>The Climate Change Coordinator is responsible for monitoring progress and report progress every 6 months to the Sustainability Commission. All reports will be made available for public scrutiny. To ensure that the action plan continues to be fit for purpose and responds to changing regional or national priorities, the Sustainability Commission will be responsible for reviewing it on an annual basis.</p>
Purpose and Aims of the Strategy	<p>The Climate Change Action Plan is needed as mitigate and adapt to the impacts of climate change forecast for the region. This includes:</p> <ul style="list-style-type: none"> • Average temperatures 1.0 - 2.3°C higher by 2050s and 1.6 - 3.9°C higher by 2080s

Strategy Title	Your Climate: Yorkshire and Humber's Climate Change Action Plan
	<ul style="list-style-type: none"> • Winters up to 20% wetter by 2050s with higher rainfall intensities • Increase in sea level between 15-75cm by 2080s • Decrease in summer rainfall by up to 32% by 2050s • Temperature extremes become more common • 4 times fewer frost nights, 5 times as many warm summer nights • More very hot days, fewer foggy days <p>This action plan aims to help build the capacity within Yorkshire and Humber to reduce emissions and to adapt to the impacts of a changing climate. It provides the region with the framework of action to respond to the threat of climate change.</p> <p>It aims to enable significant steps to be made over the next 3-5 years towards ensuring the region is both prepared for the likely impacts of climate change and to achieve 60% greenhouse gas reductions by 2050. It sets out how a partnership approach will make a practical difference to combating climate change, adding value to national initiatives. The draft Action Plan states that the RSS should address the need to adapt to climate change by economic sector, and support the development of low carbon generating capacity.</p> <p>Your Climate principally focuses on delivering actions that will help to reduce emissions or adapt to the impacts of climate change. However, it has a secondary function to contribute to the development of regional policies to ensure that the policy framework is right to deliver these actions and the actions required in the near future.</p> <p>The region has adopted a target in the Regional Economic Strategy of reducing greenhouse gas emissions by at least 20% over the period 1990 to 2010. This target was also adopted in the draft Regional Spatial Strategy published in 2004, together with an interim target to achieve 25% emissions reductions by 2015 as a means to put the region on track towards 60% emissions reductions by 2050.</p> <p>A report commissioned by Yorkshire Futures calculated that the region emitted 87.7 million tonnes of carbon dioxide equivalent (mtCO₂eq) in 1990. By 2001, emissions had reduced to 81.7 mt CO₂, a reduction of 6 mtCO₂eq over 11 years. To reach the 20% reduction target of 70.2 mt CO₂ by 2010 requires a reduction of almost 1.3 mt CO₂ per year for 9 years, more than double the rate that has been achieved to date.</p> <p>At the time of drafting, the report highlighted that the region has not adopted any targets for climate change adaptation within the RES, RSDF or RSS. Adaptation is not easy to set targets for or to monitor as there is no simple quantifiable measure. The action plan will therefore work to identify key regional adaptation targets, and integrate these with key regional strategies.</p>
SECTORS THAT IMPACT ON GREENHOUSE GAS EMISSIONS	
Power Generation	<p>The regions power stations provide 18% of the UK's electricity generating capacity and in 2000 our region emitted approximately 12.5% of UK greenhouse gases (GHGs). They account for over 50% of regional emissions.</p>

Strategy Title	Your Climate: Yorkshire and Humber's Climate Change Action Plan
	<p>New fiscal incentives to encourage emissions reductions (EU Emissions Trading Scheme and Renewables Obligation). The difficulty is the region needs to maintain supply whilst demand remains high particularly as the majority of electricity generation is consumed outside the region.</p> <p>The action plan supports development of low carbon generating capacity in the region and development of biomass infrastructure.</p> <p>It encourages generators to use UKCIP guidance to identify impacts and implement risk management strategies.</p> <p>Water industry investing in energy efficiency, on site CHP and renewables to use methane and generate green electricity.</p>
Transport	<p>The demand for transport is rapidly growing in the region and leading to increased emissions, particularly from road transport and aviation.</p> <p>Climate change will result in increased risk of travel disruption, habitat disruption and damage to the build environment from extreme weather events.</p> <p>There are no specific mitigation actions in the action plan.</p>
Domestic	<p>Climate change means local season and annual droughts may become more frequent, exacerbated by higher domestic and business water demands in hot weather, will require new water storage facilities or better management existing resources.</p> <p>Some houses will be at risk from increased flooding, subsidence, overheating and extreme storm events as a result of climate change. There will also be increasing demands on domestic water consumption.</p> <p>Housing is the third highest greenhouse emitting sector in region. It has an even higher degree of influence when indirect emissions included. Local authority has duty under HECA to report on actions to reduce emissions.</p> <p>The action plan identifies the need to influence each individual householder to effect change - as the behavioural aspects need to be addressed as much as physical elements. Societal shift to low occupancy housing and increased use of appliances is offsetting energy efficiency reductions. Low occupancy housing also increases water demands. To address this, the action plan identifies the opportunity to work with the insurance industry to encourage householders to adopt resilience measures.</p> <p>The slow replacement rate of housing in UK means existing housing must be improved to reduce emissions. The existing at risk housing stock is expensive to treat and developers are not considering climate risk in new developments.</p> <p>The action plan proposes supporting the Regional Housing Strategy and local planning policy to specify lower emission houses and integrating work with the Regional Energy Strategy.</p> <p>The action plan also seeks to ensure climate risk is spatially understood and reflected in planning policy.</p>
Industry	<p>The action plan identifies opportunities to use the regional science and technology expertise to develop potential new products to find ways to reduce emissions.</p> <p>Climate change will impact industry by changing the type and location of raw</p>

Strategy Title	Your Climate: Yorkshire and Humber’s Climate Change Action Plan
	materials, causing potential damage to infrastructure and disrupting processes sensitive to environment.
Agriculture	<p>Positive impacts of climate change will be a longer growing season extended by 45 - 100 days, this will potentially result in greater agricultural and forestry productivity (although this could be constrained by drought). Longer growing seasons will be beneficial to many crops, although others will not tolerate increasingly dry conditions or an increased incidence of flooding. The action plans suggests farmers will need to adapt timing of planting and choice of crops.</p> <p>Reduced soil moisture could threaten some habitats and requiring changing agricultural practices; there is also the risk of flooding of land or the increased need for irrigation.</p> <p>Only 5.8% of the region is wooded compared to a national average of 8.4%. There is great potential to extend woodland cover to increase carbon sequestration and provide a source of renewable energy while considering the impact upon the environment and water resources.</p> <p>However climate change is seen as a minor issue compared to regulatory (Common Agricultural Policy - CAP) reform. There is uncertainty over effectiveness of land management and afforestation as a flood prevention measure, and the biomass market is not yet mature. There is also limited understanding of interaction between soil carbon and carbon stored in biomass.</p> <p>The action plan seeks to provide suitable information to farmers to enable forward planning, investigate appropriate afforestation as a mechanism to minimise flood risk and support the development of the biomass market and infrastructure.</p>
Commerce	<p>In terms of commerce the action plan identifies the following opportunities.</p> <ul style="list-style-type: none"> • Tourism and leisure industry likely to benefit from warmer weather • There is the potential for new insurance products • Increased need for resource management services • Reduction in cold weather illnesses but increase in others <p>Some financial and service companies may have opportunity to develop new products to help manage or spread the risk of climate change.</p> <p>The action plan seeks to promote assistance available to commercial sector to help manage energy and assist commercial sector to identify risks and opportunities.</p>
AREAS OF POTENTIAL ADAPTATION	
Sea Level Rise	Climate change will result in loss of land due to increased erosion rates and flooding with a larger area within the Indicative Floodplain causing regeneration and insurance problems, loss of internationally important intertidal habitat and increased tidal flooding.
Flooding	<p>Flooding poses the greatest immediate threat both to low lying areas around the Humber and to many inland communities in the regions numerous river valleys.</p> <p>Increased flood risk impacts on transport and built environment potentially</p>

Strategy Title	Your Climate: Yorkshire and Humber’s Climate Change Action Plan
	<p>leading to insurance companies refusing to provide flood cover for high risk areas.</p> <p>Climate change will result in more winter flooding with a larger area within the Indicative Floodplain, urban drainage problems and heritage and archaeological sites vulnerable to drought, flooding and water-logging.</p>
Water Resources	<p>Changing rainfall patterns will affect the quantity of water available to all water users and the environment. Greater winter rainfall will recharge aquifers and benefit reservoirs. However, water quality will vary depending on flow. Lower summer flows will reduce water for abstraction and there will be greater demand for water in summer</p> <p>Provision of adequate water supplies is the core business of the water industry so water resource planning and drought contingency planning are also core business. The water industry already conducting R&D into climate impacts on business. This is a heavily regulated sector, reducing opportunities for water companies to develop and finance innovative projects.</p> <p>Individuals and organizations need to take steps to conserve water. This is outside direct control of water industry although it can influence through use of metering.</p> <p>The action plan seeks to promote a response by water industry to emissions reduction as good corporate approach and promote the need for water conservation measures by individuals and organisations strategically and through communications strategy.</p>
Agriculture	See section on agriculture above
Habitat, Biodiversity & Landscape	Climate change will result in potential overall increase in biodiversity, species migration, increased pressure on National Parks and sensitive habitats, increased fire risk and loss of montane heathland and peat bogs.
Buildings and Construction	<p>The action plan identifies the long-term impact on emissions through embodied energy in building materials and energy efficiency of building. Building Regulations increasingly demanding better energy efficiency, however the majority of current buildings do not provide flexibility to cope with future climate.</p> <p>Construction workers can only build to plans given by developers. The construction sector lacks some sustainable construction skills and knowledge.</p> <p>This is combined with poor understanding by planners, developers and builders of likely physical or spatial impacts of climate change. As a result there are short term housing strategies encouraged with little consideration of slow replacement rates.</p> <p>The action plan seeks to promote sustainable construction concept to architects, developers and builders and provide targeted information to construction sector to promote climate resilience.</p>
Industry	See section on industry above
Transport	See section on transport above
How does this strategy	The action plan confirms the region is not on track to meet its commitment to

Strategy Title	Your Climate: Yorkshire and Humber's Climate Change Action Plan
<p>contribute to the long term reduction of GHG Emissions?</p>	<p>achieve emission reductions of 20% between 1990 and 2010. It understands the issue and implications of climate change. The key is to translate actions into actual implementation and change on the ground.</p>
<p>How does this strategy contribute to the delivery of adaptation actions?</p>	

C1.15 Improving Your Environment: Summary of Environment Agency Work in
Yorkshire and Humber

Strategy Title	Improving Your Environment: summary of our work in the Yorkshire and Humber Region 2006 - 11
Originator	Environment Agency
Published Date	Unknown
Target Area	Yorkshire and Humber Region
Statutory or Non Statutory?	Non-statutory
How the Strategy is Prepared?	The Environment Agency have led the preparation of this document, it forms their corporate strategy for the region over the period until 2011.
Decision Making Processes	The document details the Environment Agencies action plan over the next five years. It provides details on what the EA will deliver and specifies how other partners and agencies can contribute to implementation of the action plan.
Purpose and Aims of the Strategy	<p>The strategy's goals are to protect and improve the environment through green business and sustainable use of natural resources; and managing the two big risks of limiting and adapting to climate change and reducing flood risk.</p> <p>In 1998 the region produced 60,690 kilotonnes of greenhouse gases and in 2004 this increased by seven per cent to 64,667 kilotonnes. The strategy seeks to ensure all regional partners and local authorities deliver the actions in the regional climate change action plan in response to this.</p> <p>The strategy has the following objectives:</p> <ul style="list-style-type: none"> • A better quality of life; • Enhanced environment for wildlife; • Cleaner air for everyone; • Improved and protected inland and coastal waters; • Restored protected land and healthier soils; • A greener business world; • Wiser, sustainable use of natural resources; • Limiting and adapting to climate change; and • Reducing flood risk.
SECTORS THAT IMPACT ON GREENHOUSE GAS EMISSIONS	
Power Generation	The Regional Assembly and Local Authorities should plan for and support renewable energy projects. The strategy seeks to ensure policies on low carbon energy and adaptations to climate change are included in the Yorkshire and Humber Regional Spatial Strategy.
Transport	The Regional Assembly and Yorkshire Forward should take air quality into account when considering transport and economic development plans.

Strategy Title	Improving Your Environment: summary of our work in the Yorkshire and Humber Region 2006 - 11
Domestic	<p>In 2003/04 the regional household recycling rate was 14.5 per cent.</p> <p><u>Homeowners and businesses.</u></p> <p>Homeowners should be aware of the risks to property and know what to do if a flood warning is received. They should also register with floodline, the EA flood warning system.</p>
Industry	<p>The strategy seeks to reduce emissions of harmful pollutants from large industrial sites and incinerators, for example by working with the chemical sector to reduce emissions through site improvements.</p> <p>It aims to encourage large industry, including power stations in the Aire Valley, to better their regulatory requirements and meet legislation to reduce sulphur dioxide emissions. It also seeks to work with the power, chemical, iron and steel sectors to reduce greenhouse gas emissions, particularly power stations in the Aire Valley. As a result regulated industry should seek to gain a competitive edge by applying new technology to reduce waste and emissions below regulatory levels.</p> <p>In terms of waste production, for the size of the region's economy, businesses in the region produced the most waste in England in 2003. The strategy seeks to advise smaller businesses on energy, waste and water efficiencies that can improve performance and the environment; and work with the chemical, food and drink, iron and steel sectors to reduce waste and adopt alternative waste disposal methods.</p> <p>The Environment Agency will:</p> <ul style="list-style-type: none"> • issue authorisations to regulated industry with targets for reducing waste and improving energy efficiency; • provide waste, water and energy advice to the biggest resource users in the chemical, iron and steel, textile and waste oil sectors; and • use our supply chain to promote environmental management and accreditation schemes. <p>Regional Assembly and local authorities should promote recycling and ensure long term waste management plans encourage reduction and re-use. All industry should implement environmental management systems and ensure suppliers have environmental care at the core of their business They should also view emissions targets as a starting point for improvement and exceed them where technically possible.</p>
Agriculture	<p>Farmers and landowners should assist by disposing of chemicals safely to protect wildlife habitats and carrying out environmental improvements and habitat projects that can be funded through grants.</p> <p>The EA will carry out farm visits and offer advice to farmers on sustainable land management and new agriculture regulations.</p>
Commerce	<p>Local authorities should identify and clean up contaminated land so that it can be brought back into use. The Regional Assembly should prioritise contaminated sites and ensure clean-up actions are included in regional plans and sustainability strategies.</p>

Strategy Title	Improving Your Environment: summary of our work in the Yorkshire and Humber Region 2006 - 11
AREAS OF POTENTIAL ADAPTATION	
Sea Level Rise	Sea levels are predicted to rise by six millimetres every year, which over 50 years could lead to the loss of 600 hectares of inter-tidal habitat around the Humber estuary.
Flooding	<p>There are 244,000 people are at risk from flooding in the region and the EA spend £24 million a year building and maintaining flood defences in the region.</p> <p>The EA will:</p> <ul style="list-style-type: none"> • promote flood risks and encourage people and businesses to take action to protect themselves from flooding; • reduce the risk of flooding to properties in the region through improved flood defences, especially in high risk locations like Leeds, Selby and Hull; • work with local authority planners to avoid development in flood risk areas; • ensure the Regional Spatial Strategy contains effective flood risk management policies; • deliver our flood warning service to 92 per cent of homes and businesses at risk of flooding; • reduce flood risk by creating 170 hectares of salt marsh and mudflat habitats at Alkborough and 300 hectares of new inter-tidal habitat on the Humber; • develop policies for managing flood risk along all river catchments; and • start implementing the Humber and Ouse flood risk management strategies. <p>The Regional Assembly and local authorities should ensure long-term planning strategies avoid development in flood areas or require developers to ‘flood-proof’ properties.</p>
Water Resources	<p>River pollution is reducing in the region. In 1990, 18 per cent of rivers were assessed as having very good chemical quality and in 2004 this increased to 26 per cent of rivers. In 2005 five beaches in the region also achieved a blue flag.</p> <p>The EA will</p> <ul style="list-style-type: none"> • improve rivers through our regulatory work with water companies and other industry, and awareness campaigns with farmers; • work with the Coal Authority on a prioritised programme of mine water pollution improvement projects; and • investigate the impact of abstractions on fisheries on the rivers Derwent, Wharfe and Ouse. <p>The strategy seeks to work with Yorkshire Water on a review of reservoir releases to maintain river flows, especially in droughts, review drought plans and deliver environmental improvements. It intends to use Natural England</p>

Strategy Title	Improving Your Environment: summary of our work in the Yorkshire and Humber Region 2006 - 11
	to jointly manage unsustainable water abstractions on the River Hull.
Agriculture	<p>Farmers and landowners should assist by disposing of chemicals safely to protect wildlife habitats and carrying out environmental improvements and habitat projects that can be funded through grants.</p> <p>The EA will carry out farm visits and offer advice to farmers on sustainable land management and new agriculture regulations.</p>
Habitat, Biodiversity & Landscape	<p>31 per cent of farmland bird species and 23 per cent of woodland bird species have declined between 1994-2003.</p> <p>The EA will work with Natural England to improve 191 hectares of Sites of Special Scientific Interest (SSSI) around the River Derwent in North Yorkshire and create over 300 hectares of wetland around the Humber.</p> <p>The strategy will change the way the EA regulate and work with businesses whose emissions are causing problems for SSSIs and other protected wildlife sites; it will remove barriers to fish migration; create eel passes around land drainage pumping stations in East Yorkshire; provide habitat corridors between EA sites and help Natural England with improvements near Doncaster.</p> <p>Regional and Local Authorities should assist by planning green infrastructure into developments to create wildlife habitats and corridors.</p>
Buildings and Construction	No direct reference
Industry	<p>The strategy seeks to reduce emissions of harmful pollutants from large industrial sites and incinerators, for example by working with the chemical sector to reduce emissions through site improvements.</p> <p>It aims to encourage large industry, including power stations in the Aire Valley, to better their regulatory requirements and meet legislation to reduce sulphur dioxide emissions. It also seeks to work with the power, chemical, iron and steel sectors to reduce greenhouse gas emissions, particularly power stations in the Aire Valley. As a result regulated industry should seek to gain a competitive edge by applying new technology to reduce waste and emissions below regulatory levels.</p> <p>In terms of waste production, for the size of the region's economy, businesses in the region produced the most waste in England in 2003. The strategy seeks to advise smaller businesses on energy, waste and water efficiencies that can improve performance and the environment; and work with the chemical, food and drink, iron and steel sectors to reduce waste and adopt alternative waste disposal methods.</p> <p>The Environment Agency will:</p> <ul style="list-style-type: none"> • issue authorisations to regulated industry with targets for reducing waste and improving energy efficiency; • provide waste, water and energy advice to the biggest resource users in the chemical, iron and steel, textile and waste oil sectors; and • use our supply chain to promote environmental management and accreditation schemes. <p>Regional Assembly and local authorities should promote recycling and</p>

Strategy Title	Improving Your Environment: summary of our work in the Yorkshire and Humber Region 2006 - 11
	ensure long term waste management plans encourage reduction and re-use. All industry should implement environmental management systems and ensure suppliers have environmental care at the core of their business They should also view emissions targets as a starting point for improvement and exceed them where technically possible.
Transport	The Regional Assembly and Yorkshire Forward should take air quality into account when considering transport and economic development plans.
How does this strategy contribute to the long term reduction of GHG Emissions?	It highlights actions the EA can achieve and deliver but also points to other strategies which the EA considers can help make progress.
How does this strategy contribute to the delivery of adaptation actions?	

C1.16 Regional Funding Allocations: Advice From The Yorkshire and Humber Region

Strategy Title	Regional Funding Allocations: Advice From The Yorkshire and The Humber Region
Originator	GOYH
Published Date	January 2006
Target Area	Yorkshire and Humber Region
Statutory or Non Statutory?	This document is required by Government to inform funding allocation for the region.
How the Strategy is Prepared?	<p>The RFA is produced jointly by Yorkshire Forward and the Yorkshire and Humber Assembly working in partnership with other key regional agencies and supported by the Regional Housing Forum and the Regional Transport Board.</p> <p>The advice is informed by 3 main regional strategies which are the Regional Economic Strategy, Regional Housing Strategy and the Regional Transport Strategy. The Regional Economic Strategy (RES) is the touchstone for the economic theme. On housing, the submission takes forward the Regional Housing Strategy, its three themes of Better Places, Better Homes, and Access to Housing, and it's Investment Framework.</p> <p>The region has worked to ensure the regional strategies are mutually supportive and that all three strands support the overarching principles of sustainable development and the Advancing Together framework. In setting priorities the advice seeks to maximise the benefits from aligning investment under each strand in line with the links discussed.</p> <p>An overall Regional Funding Allocation Coordination Board, comprising stakeholders from Yorkshire Forward and Yorkshire and Humber Assembly, has taken a strategic overview of the combined advice.</p>
Decision Making Processes	<p>The regional partners agreed to take forward work to develop their advice to Government by building wherever possible on the existing structures already in place in the region.</p> <p>The approach to prioritisation reflects the Northern Way objectives for sustainable communities, transport and economic development.</p>
Purpose and Aims of the Strategy	<p>The purpose of the document is to provide advice and justify funding allocation to the three principle sectors of economy, housing and transport within the region. The advice details how the required funds will be spent over the planned period and the implications of a 10% reduction or a 10% increase in allocated funds.</p> <p>Funding is requested in 2 blocks. Block 1 is 2005/6 to 2009/10 and Block 2 is 2010/11 to 2015/16</p>
SECTORS THAT IMPACT ON GREENHOUSE GAS EMISSIONS	
Power Generation	No direct reference.
Transport	The RFA requests a 10% increase in funding be directed wholly towards transport, to facilitate a small number of additional identified priority outcomes, and to invest in flexible and imaginative ways that best allow major schemes to deliver key regional transport priorities which are linked to

Strategy Title	Regional Funding Allocations: Advice From The Yorkshire and The Humber Region
	<p>those in the RES and RHS needs. The RFA is only part of the resourcing required to support transport infrastructure in the region.</p> <p>Band A priority outcomes focus on improving connectivity between and to urban areas, particularly in terms of the public transport offer. Band B priority outcomes focus on improving accessibility to market and coastal towns and regeneration priority areas. Band C priorities seek to address connectivity in more peripheral areas of the region such as to the National Parks.</p> <p>Block 1 funding allocation is planned for committed schemes; for the period 2006/07 – 2008/09, this total is £122.3m. Example committed schemes include Leeds Inner Ring Road Stage 7, MyBus (Yellow Bus), Sheffield Northern Inner Relief Road II & III, Barnsley Interchange and East Leeds Link Road.</p> <p>Block 2 funding allocation is planned for Local Transport Plan (LTP) schemes where a major scheme business case had been submitted and Highways Agency schemes subjected to a multi-modal or similar study. Such schemes include increased rail and road capability to Hull and Humber ports, improvements to the management of strategic north-south road links to protect their strategic role, improved surface access to airports and improved public transport links (capacity and quality) between the main urban areas in the Leeds city region, in particular to Leeds city centre.</p> <p>Further block 2 funding is intended to be used to improve accessibility of regeneration priority areas and key market and coastal towns; particularly public transport links, to ensure sustainable access to employment opportunities.</p> <p>Block 3 funding will be allocated for emerging schemes and longer term Highways Agency schemes for which development funding is required.</p>
<p>Domestic</p>	<p>A new regional framework for public sector funded housing interventions in the region has been adopted which has 3 sub priorities:</p> <ul style="list-style-type: none"> • Places • Access • Homes <p>These sub priorities focus on the interventions necessary to create places where people wish to live and enabling fair access to housing but there are some interventions listed which link to militating against and adapting to climate change. These include:</p> <ul style="list-style-type: none"> • Providing high quality energy efficient homes • Delivering energy efficiency and eradicating fuel poverty. <p>For Block 1 funding, West Yorkshire and South Yorkshire have the largest funding allocations respectively, reflecting their scale and socio-economic as well as housing needs.</p> <p>For Block 2 funding, the RFA recognises:</p> <ul style="list-style-type: none"> • The need to deliver more flexible housing products to meet changing households, aspirations, and work patterns – such as increasing moves towards home-working; and; • Even greater focus on sustainable housing, with good design life and

Strategy Title	Regional Funding Allocations: Advice From The Yorkshire and The Humber Region
	energy efficiency, and locations with good public transport access – linking to transport goals and the need to reduce congestion and emissions.
Industry	The RFA identifies a need for single pot funding against the Regional Economic Objectives of Driving Business; Connecting People; and Creating a Sustainable Region. In terms of industry these objectives seek to <ul style="list-style-type: none"> • foster innovation to develop markets and products • increase, retain and imbed business investment in the region • Grow business in knowledge based regional clusters • Protect, enhance and utilise the environment and natural resources and effective energy and utilities (by encouraging renewable energy and ‘resource productivity’ in business)
Agriculture	Under the Regional Economic Objective of ‘Creating a Sustainable Region’ and sub objective ‘Protect, enhance and utilise the environment and natural resources and effective energy and utilities’ the RFA states that the region will seek to create jobs and economic opportunity in forestry, energy crops and organic farming.
Commerce	From an economic perspective a total of £1076 million is sought from Block 1 and 2 funding for the RES objective ‘Creating a Sustainable Region’. This is part of the RDA total budget.
AREAS OF POTENTIAL ADAPTATION	
Sea Level Rise	No direct reference.
Flooding	No direct reference
Water Resources	No direct reference
Agriculture	No direct reference
Habitat, Biodiversity & Landscape	No direct reference
Buildings and Construction	Principles of sustainable construction are promoted within the Regional Housing Strategy and are put forward to support the budget requirements for the RFA.
Industry	See section on industry above
Transport	See section on transport above
How does this strategy contribute to the long term reduction of GHG Emissions?	The RFA seeks funding for the three key areas of the economy, transport and housing. It is very much focused on delivering progress in the region and tackling key social and economic issues. Funding is sought for reducing green house gas emissions and delivering more energy efficient homes, but this is more peripheral to the funding pitch for more mainstream objectives.
How does this strategy contribute to the delivery of adaptation actions?	The RFA seeks funding for the three key areas of the economy, transport and housing. It is very much focused on delivering progress in the region and tackling key social and economic issues. Funding is sought to encouraging the use of renewable energy and resource productivity in business and the

Strategy Title	Regional Funding Allocations: Advice From The Yorkshire and The Humber Region
	application of high quality design and environmental standards for all development receiving public support, but this is more peripheral to the funding pitch for more mainstream objectives.

C1.17 Warming Up The Region

Strategy/Document Title	Warming up the region: The impacts of climate change in the Yorkshire and Humber region
Originator	WS Atkins, Stockholm Environment Institute- York (SEI-Y), The Met Office
Published Date	June 2002
Target Area	Yorkshire and Humber Region
Statutory or Non Statutory?	Non Statutory
How the Strategy is Prepared?	<p>This document is the Yorkshire and Humber Climate Change Impact Scoping Study Draft Final Report Rev. 2. The document was prepared by Atkins, the SEI – Y and the Met Office.</p> <p>The study was commissioned by Business in the Community on behalf of a consortium of organisations and funded by the Environment Agency, Yorkshire Forward, the Yorkshire and Humber Assembly and the Government Office for Yorkshire and Humber.</p> <p>The analysis was based on literature review, consultations with over 100 stakeholders and expert opinion.</p> <p>The Project Steering Group comprised Yorkshire Forward, Yorkshire and Humber Assembly, GOYH, Environment Agency, Hull City Council, Business in the Community, AEP, and UK Climate Impacts Programme (UKCIP).</p>
Decision Making Processes	This study is one of a number of studies conducted within the UK Climate Impacts Programme (UKCIP) framework. UKCIP helps organisations assess how they might be affected by climate change, so they can prepare for its impacts.
Purpose and Aims of the Strategy	<p>This study focuses on impacts rather than mitigation which is the subject of a separate scoping study. This study aims to identify the main impacts of climate change, stakeholder perceptions and responses and gaps and uncertainties in our understanding of climate impacts.</p> <p>This study has evaluated the potential impacts of climate change on changing flood risks, water resources, agriculture, forestry, the service sector, industry and commerce and transport. The key impacts of climate change are related to increased temperatures all year round, wetter winters and drier summers.</p> <p>The objectives of the study are as follows:</p> <ul style="list-style-type: none"> • To establish an overview of the region's current baseline position with regard to climate change; • To predict the likely impact of climate change within the region; • To identify the likely effects arising from climate change impacts in the region, assess the broad significance of these and identify the main issues for key stakeholders; • To recommend targets and indicators of change that can be monitored; and • To identify key information gaps and uncertainties in assessing the impacts and recommend ways to respond.

Strategy/Document Title	Warming up the region: The impacts of climate change in the Yorkshire and Humber region
	The study makes reference to climate change mitigation, i.e. reducing greenhouse gas emissions (GGEs) but it is mostly concerned with climate change impacts and adaptation.
SECTORS THAT IMPACT ON GREENHOUSE GAS EMISSIONS	
Power Generation	No direct reference.
Transport	As a result of climate change changing patterns of customer demand and disruption to transport services will affect urban centres.
Domestic	The report recognises there will be higher demands for water in the summer months from both households and some businesses.
Industry	<p>There are a range of opportunities for businesses in the Region related to the development of products that improve water efficiency for agriculture, industrial processes and public buildings.</p> <p>Small and medium sized enterprises need to become more involved in climate change adaptation. Small environmental technology and specialist service companies may be able to establish regional and national niches to provide services that help adapt to climate change and mitigate against global warming. This is already seen in energy-related technology enterprises in the region.</p> <p>Waste minimisation, water efficiency and the reduction in energy use provide economic benefits as well as reducing greenhouse gas emissions and supporting climate change adaptation strategies. There are major opportunities for growth in the environmental technology sector to develop products and services that can make industry more eco-efficient. Potential growth in these types of specialist services is centred on the region's university campuses and science parks in Leeds, Sheffield and York.</p> <p>Specific actions relating to industry include:</p> <ul style="list-style-type: none"> • Identifying any competitive advantages that may emerge for the region • Increasing resource efficiency • Supporting small and medium sized companies to address adaptation
Agriculture	<p>The report identifies that as a result of climate change there will be large reductions in soil moisture in summer across the region affecting farms, parklands and suburban gardens on sandy soils, for example on parts of the Vale of York, as well as increasing the risk of subsidence of property on clay soils in the Vales of Lincolnshire and Mowbray. In terms of opportunities there will be an increase in the length of the growing season by between 45 and 100 days along the Yorkshire and Lincolnshire coasts.</p> <p>Afforestation and changing rural land use have important roles to play in adaptation strategies in other sectors, such as flood defence, water supply and recreation and tourism. If agricultural land is taken out of production in the right locations, changing land use could provide multiple benefits for conservation, recreation and the reduction of flood risks.</p> <p>Climate impacts on agriculture will affect food processing, one of the most</p>

Strategy/Document Title	Warming up the region: The impacts of climate change in the Yorkshire and Humber region
	<p>important industries within the region. This could result in the following:</p> <ul style="list-style-type: none"> • Some food manufacturers having to locate outside the region due to direct flood damages. • Greater demand for salad crops from local urban centres and external markets in the UK and Europe. • Increased yields, employment and possibly profit in the forestry industry. There are opportunities for win-win situations to mitigate against and adapt to climate change in this sector. <p>The report proposes the following actions:</p> <ul style="list-style-type: none"> • Increase water efficiency in agricultural irrigation and processing • Development of alternative local water sources • Improve effluent quality with sustainable rural drainage systems • Identify of emerging high value niche food and drink markets • Raise awareness of adaptation methods for farmers • Maximise the region’s advantages e.g. diversity of soils for pea industry • Plan for the changes in fish species and the adverse impact on small industries • Consider climate change in agricultural policies <p>An adaptive and innovative agriculture and food cluster could benefit from change as long as climate change is considered in long term planning.</p>
Commerce	<p>The report identifies opportunities for tourism and recreation sectors including the re-branding and marketing of coastal tourism and increased use of country parks.</p> <p>Specific actions include:</p> <ul style="list-style-type: none"> • Identifying and promoting the opportunities for tourism and recreation • Realising the potential for growth in resource management and insurance services. • Supporting Local authorities, health authorities and emergency services to plan adaptation to changes in flooding, fire risk, transport, health, social activity and lifestyle.
AREAS OF POTENTIAL ADAPTATION	
Sea Level Rise	<p>The report identifies major changes by the 2080s as a result of climate change. This includes increases in sea level of between 6 and 82 cm, with the greatest rates of rise in the Humber Estuary under the High Emissions scenario. (The scenarios for the Humber are centred on an average rate of 6mm per year that is currently used for planning purposes).</p> <p>There are potential “wins” for the coastal zone, such as the development of new forms of tourism and recreation to take advantage of the warmer climatic conditions. The main business opportunities relate to increasing the tourism potential of the coastal areas and providing services to mitigate</p>

Strategy/Document Title	Warming up the region: The impacts of climate change in the Yorkshire and Humber region
	<p>against climate extremes for example:</p> <ul style="list-style-type: none"> • Development of new forms of low impact tourism along the Yorkshire coast • Development of new flood proofing and flood protection products • Specialist services to reduce the risks of supply chain or utility disruption due to flooding and specialist insurance products and schemes to insure property in the tidal floodplain <p>New flood defences in the region have taken future rises in sea level into account. Shoreline Management Plans and Integrated Coastal Zone Management programmes mean that the coastal flood defence sector have responded more to the threats of climate change than other sectors.</p> <p>The Environment Agency has recognised the potential losses of key inter-tidal habitats and is in the process of identifying suitable coastal sites for the managed realignment of embankments to create approximately 1000 hectares of inter-tidal habitat around the Humber on what was agricultural land.</p> <p>Current guidance suggests that all land within the coastal floodplain is at high risk but this is prime development land for new industry that may be required for the region’s development. In some places there can be a gradual “roll-back” of development from the coast, whereas in others, higher levels of protection may be required.</p> <p>More detailed zoning of the relative risks is required so that flood and erosion risks can be considered in detail alongside other planning considerations. Some Maritime District Councils, such as East Ridings, have started this process as part of their Integrated Coastal Zone Management Plan but more work is required at a regional level.</p>
<p>Flooding</p>	<p>By 2080 increase in high rainfall intensities during the winter across the region, could cause urban flooding problems in the Regions cities.</p> <p>Changing flood risks and drainage problems provide an opportunity for more proactive management of flooding through the development of sustainable drainage systems in both urban and rural environments. For example, the restoration and of floodplain washlands and creation of water meadows would have conservation benefits as well as reducing flood risks.</p> <p>Catchment Flood Management Plans will provide a more integrated assessment of flood risks and linkages with other planning issues. Fundamental changes to the planning process and clear indications of the relative importance of different statutory guidelines, such as flood risks versus those on brownfield development and housing density, are required to address some of the challenges of future regeneration and increased flood risks.</p> <p>The report proposes the following actions:</p> <ul style="list-style-type: none"> • Research into climate change and flood risk • Improvements to flood defence including the creation of more washlands and water meadows • Closer integration with planning system

Strategy/Document Title	Warming up the region: The impacts of climate change in the Yorkshire and Humber region
Water Resources	<p>Greater average winter recharge to groundwater sources is likely to increase the amount of water available and relieve the pressure on aquifers that are currently over-used.</p> <p>Climate change is likely to result in higher river flows in the winter and much lower flows in the summer. This will provide positive benefits for water reservoirs but negative impacts on businesses that rely on abstracting from rivers in the summer months. Businesses that will be affected need to invest in water efficiency and ensuring alternative water supplies.</p> <p>Agricultural needs for water will increase due to higher irrigation demand, particularly for potatoes, and increased demand nationally for seasonal salad products. The water demand of irrigated crops will increase in the summer months. Farmers reliant on abstraction from rivers will need to consider alternative water sources or develop small scale on-farm reservoirs.</p> <p>Water companies need to optimise water management practices to minimise the impact on the environment of pumping water from rivers like the Derwent in summer, while reducing pumping costs and consequently their greenhouse gas emissions. The Region needs to use water more carefully during the summer months and water companies need to ensure that water can be distributed effectively throughout the region.</p> <p>Drainage systems in urban areas such as Bradford, Leeds and Sheffield need further investment to help improve water quality. In upland areas, including important drinking water reservoirs, water quality may deteriorate due to the release of organic soil materials that discolour water.</p> <p>More work is required on finding suitable small scale water supplies, grey water recycling, understanding potential water quality changes, managing fisheries and drought contingency planning.</p> <p>The report proposes the following actions:</p> <ul style="list-style-type: none"> • Research by water industry and government agencies into potential impacts on supply, demand, water quality and sewerage design • Businesses and households increase in water efficiency • Security of supplies and minimise pollution • Locating more small scale water supplies and adopting grey water recycling • Drought contingency planning
Agriculture	See section on agriculture above
Habitat, Biodiversity & Landscape	<p>The report identifies that climate change will result in increased bracken invasion due to warming and drying of heathlands and moorlands. As a result there is Increased fire risk on heathlands which could lead to a larger number of closure days on the North Yorks Moors. Warming and drying will impact differently on individual plant and animal species. Some animal species, like badgers, are expected to initially do well under climate change.</p> <p>The overall impacts on biodiversity are uncertain but there may be an overall increase in biodiversity with major decreases only in coastal areas or where habitats are already marginal. Many of the region’s more marginal habitats,</p>

Strategy/Document Title	Warming up the region: The impacts of climate change in the Yorkshire and Humber region
	<p>like the upland heaths and hay meadows, are particularly vulnerable and warming conditions could change them forever. Recreation pressures may increase with impacts on sensitive habitats.</p> <p>Further work is required to develop flexible management plans for important habitats. Rather than preserve species and habitats that will migrate and change, these plans need to provide positive conservation benefits such as increased biodiversity, water habitats of good ecological quality and land management practices that enhance wildlife and benefit rural communities. Careful husbandry of the region’s land and water resources is required so that the region can maintain its high quality natural landscapes, continue to improve water quality and avoid the water scarcity that will affect other regions,</p> <p>Specific actions include:</p> <ul style="list-style-type: none"> • Flexible management plans for species and habitats that focus on positive conservation benefits rather than preservation • Monitoring the condition of heritage and archaeological sites
Buildings and Construction	<p>Energy saving schemes in industrial and commercial premises are designed and implemented in most large new developments. Some sections of the building industry have responded with both innovative and “compliance” design features in a wide range of buildings.</p> <p>The report identifies the opportunity to design for future conditions such as sustainable urban drainage, flood proofing services and climate control systems.</p>
Industry	See section on industry above
Transport	No direct reference.
How does this strategy contribute to the long term reduction of GHG Emissions?	This report highlights implications of a changing climate in the region and sets out a number of actions to adapt to this.
How does this strategy contribute to the delivery of adaptation actions?	

C1.18 Yorkshire and Humber Regional Spatial Strategy and Climate Change Study:
Summary Report

Strategy Title	Yorkshire and Humber Regional Spatial Strategy and Climate Change Study: Summary Report
Originator	Prepared for Yorkshire and Humber Regional Assembly by Land Use Consultants in association with Wilbraham & Co.
Published Date	7 th October 2005
Target Area	Yorkshire and Humber Region
Statutory or Non-Statutory Document?	This summary report is forms part of the baseline and evidence base to support the preparation of the Regional Spatial Strategy; which is now a statutory document.
How the Strategy is Prepared?	<p>Yorkshire and Humber Assembly commissioned Land Use Consultants and Wilbraham and Co. to evaluate the Yorkshire and Humber Regional Spatial Strategy (December 2004) against climate change policy and strategy. The report reviews the 2004 Selective Review RSS and makes recommendations for the draft RSS issued in December 2005</p> <p>To meet the objectives detailed in the purpose and aims section, Land Use Consultants used the following methodology:</p> <ul style="list-style-type: none"> • Review of legislation, policies and strategies relevant to planning and climate change at the national and regional level. • Review of the current RSS (Selective Review, December 2004) for Yorkshire and the Humber, along with the emerging approach to the new RSS (December 2005). • Review of the approach of two other regions to climate change in their RSS. • Consultation with regional stakeholders and a sample of local authorities, to seek their views on what RSS should address in relation to climate change. <p>Regional and local stakeholders were consulted to determine what they considered the RSS should do to address climate change issues and, at the local level, whether they considered the current approach of the RSS could be easily reflected in and implemented through Local Development Frameworks.</p> <p>Thirteen interviews were carried out with regional stakeholders from the Yorkshire and Humber Assembly, Yorkshire Forward, the regional Climate Change Partnership, the Environment Agency, English Nature, the House Builders Federation, Friends of the Earth, the Government Office, and Yorkshire and Humber Regional Environment Forum. In addition, ten interviews were carried out with planning and local transport plan officers from Calderdale MBC, Hambleton DC, Leeds City Council, Kingston Upon Hull City Council, North Yorkshire County Council, Doncaster MBC and the South Yorkshire LTP Partnership.</p>
Decision Making Processes	<p>The Yorkshire and Humber Assembly commissioned the research to inform the scope and approach it should take in addressing climate change in the emerging draft RSS (December 2005).</p> <ul style="list-style-type: none"> • The views of stakeholders were used to inform the study. The key points

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	<p>from the interviews were:</p> <ul style="list-style-type: none"> • A divide in opinion regarding the extent climate change is sufficiently reflected in RSS policy; • Agreement that RSS policies on climate change are being reflected in LDFs; • A need for guidance on how to implement policies and progress monitoring; • Clarification on actions, responsibilities and delivery mechanisms so stakeholders are fully aware on what they should be doing and how performance can be measured; • Concern by some stakeholders over conflicts between climate change objectives and economic objectives (including airport policy); • Concern that the success of the RSS in reducing emissions will only be partial; and • The main target should be to improve the energy efficiency of existing development.
<p>Purpose and Aims of the Strategy</p>	<p>It was felt the 2004 Selective Review RSS should be doing more to help reduce the region’s contributions to the causes of climate change. However there was concern this approach would mean going beyond the statutory limits of the RSS, which could have damaging consequences for the economy of the region. Therefore the overall aim of the research was to understand what the statutory limits of the RSS were in terms of responding to climate change and how RSS policy fits into the wider framework for climate change strategy at the national, regional and local level.</p> <p>The specific objectives of the study were to:</p> <ul style="list-style-type: none"> • Set out the statutory parameters of RSS in terms of what it can consider and contain, especially in terms of climate change. • Set out what national policy and legislation (including Building Regulations) provide for in terms of climate change, and to suggest what RSS policy should reasonably be expected to provide for. • Identify areas of Government legislation, policy or guidance that act as major barriers or obstacles to the region’s climate change aspirations (i.e. its regional targets for carbon equivalent reductions). • Consider the presentation, implementation and monitoring of climate change related policies in RSS, Local Development Frameworks (LDFs) and Local Transport Plans (LTPs). <p>In addition the research considered:</p> <ul style="list-style-type: none"> • How RSS policies should be reflected in LDFs and LTPs and whether from the available evidence (eg. annual monitoring reports) this is happening. • Whether responsibilities for implementation of policies in RSS are sufficiently clear.

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	<ul style="list-style-type: none"> • Whether the potential contribution of specific sectors to the achievement of climate change targets is sufficiently clear. • What mechanisms need to be put in place to monitor progress against policies in RSS that have an impact on climate change mitigation or adaptation issues, and what gaps currently exist in data availability. • The emerging messages from the review of the UK Climate Change Programme. • The approach of other regions. • Existing studies / evidence on the potential opportunity costs to the regional economy of the types of measures associated with regional policy encouraging / prescribing higher climate change related specifications in the RSS (e.g. through greater energy efficiency, more embedded energy generation, renewable energy generation). <p>The report concludes that it may not be possible to resolve the inherent tensions within RSS, such as the need to provide for additional development and the ability of the region to meet its greenhouse gas emission targets. As a result the RSS is constrained to mitigate against climate change but can put in place measures for adaptation. It may therefore be necessary to re-examine the evidence base for the regional targets included within the RSS to ensure that these do not act as a deterrent to action, but rather as an achievable challenge. It recommends further guidance on RSS climate change policy implementation and stakeholder responsibility should be detailed in the Climate Change Action Plan.</p>
SECTORS THAT IMPACT ON GREENHOUSE GAS EMISSIONS	
Power Generation	<p>The region’s higher than average representation of the power generation industry, which is the main contributor to climate change in the region accounting for 58% of CO2 emissions in 2001.</p> <p>The role of the region in power generation skews its contribution to national emissions, and is an area which the RSS is unable to influence. However, the development of renewable energy generation (and other low carbon generation) is a key policy objective which is reflected in the RSS, and could be promoted further.</p> <p>Although the RSS has little influence over the power generation sector, the draft RSS could encourage the incorporation of renewable energy into new developments (e.g. solar panels) and consider other forms of renewable energy generation (e.g. windfarms, hydro, biomass).</p> <p>The report recommends rolling out the renewable energy guidance for North Yorkshire to the rest of the region and setting a regional target for CHP. It states the RSS should proactively deliver renewable energy capacity as part of new development and set renewable energy targets for Local Planning Authorities.</p>
Transport	<p>Road transport accounted for 13% CO2 emissions in 2001. Excluding international flights (which are not included in current emissions data), transport is the fastest growing source of emissions in the region despite having the second highest use of public transport in England (excluding</p>

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	<p>London) and is working to offset any gains in industrial energy efficiency. Aviation development in the region is also growing with the opening of Robin Hood Airport, and will clearly contribute to this increase in emissions.</p> <p>The report recommends the RSS should focus on reducing energy emissions from other sectors such as transport. There is the opportunity to reduce energy use by travelling less or by using sustainable modes. Mitigation measures can also be introduced in the Regional Transport Strategy through regional traffic reduction targets, making public transport an attractive alternative to the car and introducing demand management measures.</p>
Domestic	<p>The domestic sector accounted for 10% of CO2 emissions in 2001. The report does not put forward any recommendations relating specifically to housing. These are covered under within the wider recommendations relating to built environment, urban design and building construction.</p>
Industry	<p>The report recognises the need for regional economic sectors to adapt to climate change impacts either through relocation, redevelopment to reduce flood risk or diversification into new markets. This has a spatial implication which Local Authorities need to plan for.</p> <p>The study also acknowledges the opportunity for the tourist industry to take advantage of the positive climate change impacts and recommends this should be reflected in the RSS policy on tourism.</p>
Agriculture	<p>The report recommends exploring ways to reduce methane emissions from agriculture, landfill and mining. It also suggests the RSS should recognise the need to agricultural infrastructure development as a result of climate change.</p>
Commerce	<p>There is a perceived potential conflict between regional economic regeneration objectives and achievement of climate change objectives. It may not be possible to resolve the tension between the need to provide for additional development and the ability of the region to meet its GGE targets.</p> <p>The report suggests the RSS should place emphasis on urban areas and sustainability by increasing the rate of development on brownfield land and locating jobs, shops, services and facilities within easy walking or cycling distance.</p>
AREAS OF POTENTIAL ADAPTATION	
Sea Level Rise	<p>There is a coastal erosion risk from sea level risk and possible increases in storminess.</p>
Flooding	<p>A key issue in the region is the need to regenerate existing towns and cities which lie within floodplains. This involves allowing development to go ahead in higher flood risk areas for social and economic reasons.</p> <p>The RSS should consider emergency planning measures (particularly in flood risk areas).</p>
Water Resources	<p>The report identifies water supply issues (e.g. Lower Derwent, Doncaster/Selby sandstone aquifer) as a result of climate change.</p>
Agriculture	<p>The report recommends exploring ways to reduce methane emissions from</p>

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	agriculture, landfill and mining.
Habitat, Biodiversity & Landscape	<p>The impact of climate change on landscape will be subsidence (especially on clay soils) and higher temperatures/heat-island effects within the main urban areas (Leeds, Bradford, Hull, Sheffield).</p> <p>The urban environment should be adapted to improve resilience to flooding, water shortages and increases in temperature, according to local / sub regional circumstances.</p> <p>The report states that the RSS should acknowledge the multiple benefits that can occur from adaptation measures such as sustainable drainage systems and tree planting resulting in enhanced biodiversity and improved amenity to the public realm.</p> <p>The study recognises the impact climate change will have on regional habitats, agriculture and landscape character. It recommends adopting flexible policies to protect and enhance biodiversity with different sub regional responses. This should include allocating land for habitat replacement in particular parts of the region such as the coastal area which is subject to coastal squeeze.</p>
Buildings and Construction	<p>The study concludes the RSS could not require standards which go beyond Building Regulations, unless there is a good regional argument to do so, e.g. in respect of areas at high risk of flooding within existing settlements, where development is needed for social and economic reasons.</p> <p>The report states the RSS could encourage developers to go further than the minimum national standards where this is feasible, with reference to best practice such as BREEAM and Ecohomes, by improving energy efficiency (e.g. through building layout, design, materials, insulation, appliances etc).</p> <p>The report recommends encouraging all new development to meet BREEAM good or excellent standard with the public sector improving the energy efficiency of housing stock and the sustainable building code being adopted for Government funded housing.</p> <p>The report recommends urban design adaptation measures should include resilience to flooding, increased storminess, temperature and integrate with measures to optimise solar gain, energy efficiency and lifetime design.</p>
Industry	See section on industry above
Transport	To reduce road fuel use the report recommends linking development of freight distribution facilities to fleet upgrades and promoting local supply networks.
How does this strategy contribute to the long term reduction of GHG Emissions?	
How does this strategy	

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contribute to the delivery of adaptation actions?	

C1.19 Our Region Our Health: A Regional Strategic Framework for Public Health in Yorkshire and the Humber

Strategy Title	Our Region Our Health: A Regional Strategic Framework for Public Health in Yorkshire and the Humber
Originator	Regional Public Health Group
Published Date	December 2004
Target Area	Yorkshire and Humber Region
Statutory or Non Statutory?	This is a non-statutory bridging document translating the Government 'Choosing Health' guidance into a framework document for the Region.
How the Strategy is Prepared?	<p>The preparation of the document was led by the Regional Public Health Group which comprises of the Department of Health, GOYH, Yorkshire Forward, YHA, North and East Yorkshire and Northern Lincolnshire Strategic Health Authority, South Yorkshire Strategic Health Authority and West Yorkshire Strategic Health Authority.</p> <p>The document recognises the need to work collaboratively. The framework originates from consultation carried out in March 2004. The Regional Public Health Group consulted on the regional priorities for public health through meetings and written submissions. This framework provides a clear focus on priorities to improve public health and a clear statement of what must be done at a regional level to support local action, clearly linked to the Government guidance 'Choosing Health'.</p>
Decision Making Processes	<p>The framework is the starting point for developing more detailed joint work programmes over the next three to five years. It is in line with the Government's plans for implementing 'Choosing Health'. The framework provided the basis for a detailed action plan produced in April 2005.</p> <p>The framework recognises the importance of linkages across regional strategies and regional organisations. Therefore one of its objectives is to continue to form and develop strategic partnerships that have the potential to improve public health, this involves working with Association of Local Authorities, Yorkshire Forward, GOYH, YHA, Regional Forum, Local Strategic Partnerships, Strategic Health Authorities, other regional agencies and community empowerment networks.</p>
Purpose and Aims of the Strategy	<p>The framework addresses the regions health issues. Compared to the rest of England, Yorkshire and Humber has some of the highest levels of preventable ill-health, long-term illness and premature deaths. This represents a huge burden in human and economic costs, which holds the region back from achieving full potential.</p> <p>The vision of the framework is 'Healthy Living, Healthy Learning, and Healthy Working: with better health for all and reduced health inequalities across our region'. The framework plans to deliver this vision through one of three purposes. This is:</p> <p>To identify the unique actions that can be taken at a regional level to influence better health and reduce health inequalities - both direct action by regional partners on wider determinants of health such as poverty, poor housing and unemployment, and supportive action to those leading public health action at a local level</p>

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SECTORS THAT IMPACT ON GREENHOUSE GAS EMISSIONS	
Power Generation	See reference to fuel poverty in domestic section.
Transport	See reference to transport in domestic section.
Domestic	<p>One of the frameworks priorities is ‘How we live’. This involves being able to live free from the social stress caused by poverty, unemployment, exclusion, discrimination and inequality which is fundamental to health.</p> <p>The framework considers the links between social stress and the kind of housing we live in, our incomes, the transport we use, the air we breathe, the water we drink, our access to needed public services, our schools, how we feel about and how involved we are in our local neighbourhoods. This affects individual health and that of families and communities; so these factors need to be influenced.</p> <p>The framework intends to achieve this by influencing public policy and improving health and reducing health inequalities through regional policies, strategies and plans such as Advancing Together, the RSS – by influencing the development of physical infrastructure to maximise potential for positive impacts on health, the RHS – by influencing planning and adoption of housing interventions most likely to conserve and promote health, such as measures to reduce fuel poverty, the RSDF – to ensure regional strategies undergo effective integrated sustainability appraisal and health impact assessment and the Northern Way – to promote action to reduce health inequalities within the growth strategies.</p>
Industry	As one of the biggest employers and investors, the healthcare sector has a significant impact on the region’s wealth and should help to support the economic development of the region, and ensure its workforce is supported by the environment they work in.
Agriculture	One of the frameworks priorities is Food, Diet & Health and implementing the Regional Food and Health Action Plan which includes 5 A DAY, the National School Fruit and Vegetable Scheme and the Strategy for Sustainable Farming and Food.
Commerce	<p>The framework recognises an economically strong and innovative region can make a lasting difference to the health and well-being of the people of the region; a fit and healthy workforce can drive a robust and progressive economy.</p> <p>The framework focuses on the Regional Economic Strategy to advance existing investment in health priorities and inequalities.</p>
AREAS OF POTENTIAL ADAPTATION	
Sea Level Rise	No specific reference.
Flooding	No specific reference.
Water Resources	No specific reference.
Agriculture	See above.
Habitat, Biodiversity & Landscape	No specific reference.

Strategy Title	Our Region Our Health: A Regional Strategic Framework for Public Health in Yorkshire and the Humber
Buildings and Construction	No specific reference.
Industry	See above.
Transport	See above.
How does this strategy contribute to the long term reduction of GHG Emissions?	<p>This framework recognises the linkages it can make with other strategies and initiatives. However the impact that climate change may have on public health is not a direct consideration of this framework.</p> <p>It is helping to encourage the reduction of green house gas emissions indirectly through the linkage made to public health and fuel poverty.</p>
How does this strategy contribute to the delivery of adaptation actions?	The framework does not consider how it can contribute to adaptation to climate change and what this may mean for public health.

Appendix D

**National Strategy
Proformas**

D1 National Strategy Proformas

D1.1 UK's Fourth National Communication under the United National Framework Convention on Climate Change

Strategy Title	UK's Fourth National Communication under the United National Framework Convention on Climate Change
Originator	Defra
Published Date	May 2006
Target Area	UK
How the Strategy Is Prepared	<p>The Communication sets out the progress that the UK has made in implementing its commitments under the United National Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol.</p> <p>The process of developing the new programme was launched in 2004 with a public consultation. The development of the programme was underpinned by analysis of the costs and benefits of each of the policies and measures using a common framework.</p>
Decision Making Process	<p>The UK has a legally binding commitment under the Kyoto Protocol to reduce greenhouse gas emissions by 12.5% below base-year levels, on average, over the first commitment period, 2008-2012. The UK also has a domestic target to reduce CO₂ emissions by 29% below 1990 levels by 2010. Long terms aim of achieving CO₂ emissions reduction by 60% by 2050 with real progress by 2020 (Energy White Paper).</p> <p>Some commitments have been driven by national policy initiatives and some have been implemented following measures adopted at EU level.</p> <p>Defra coordinates policy on climate change at the official level through inter-departmental committees chaired at Defra. A Cabinet Committee chaired by the Prime Minister makes decisions at the political level.</p> <p>Some policies are the responsibility of Defra directly, while others are the responsibility of Her Majesty's Treasury, Department of Trade and Industry, Department for Transport, the Office of the Deputy Prime Minister (now DCLG), the Foreign and Commonwealth Office and the Department for International Development.</p> <p>The UK's programme is supported by action taken by the Devolved Administrations in Scotland, Wales and Northern Ireland.</p> <p>The UK government and the governments of the devolved administrations published the Climate Change Programme in March 2006. The programme is expected to reduce emissions to 23-25% below base year levels and reduce the UK's carbon dioxide emission to 15-18% below 1990 levels by 2010.</p>
Purpose and Aims of the Strategy	<p>Set out details of the UK progress in implementing commitments to reducing green house gas emissions. Greenhouse gas emissions fell by 14.6% between the base year and 2004, driven by the restructuring of energy supply industry, energy efficiency and energy intensity improvements, pollution control measures and other policies. Without any additional measures the UK's greenhouse gas emissions are expected to be about 19.4% below base year levels by 2010.</p> <p>The principles underlying the Climate Change Programme are:</p>

Strategy Title	UK's Fourth National Communication under the United National Framework Convention on Climate Change
	<ul style="list-style-type: none"> • The need to take a balanced approach with all sectors and all parts of the UK playing their part; • The need to safeguard, and where possible enhance, the UK's competitiveness, encourage technological innovation, promote social inclusion and reduce harm to health; • Need to focus on flexible and cost effective policy options with will work together to form an integrated package; • Need to take a long-term view, looking to targets beyond the first commitment period and considering the need for the UK to adapt to the impacts of climate change; and <p>The need for the Programme to be kept under review.</p>
SECTORS THAT IMPACT ON GREENHOUSE GAS EMISSIONS	
Power Generation	<p>UK target to increase the proportion of electricity provided by renewable sources to 10% of electricity supplied by 2010. Recent projects indicate that generation may not reach the 10% target until some time after 2010.</p> <p>The UK will continue to change the share of fuels on electricity supply basis. It is a key Government policy to spend £80m in the next three years to support micro-generation technologies with the aim of encouraging manufacture at higher scale leading to low costs.</p> <p>It is a key Government policy to seek to achieve substantially higher carbon savings from the Energy Efficiency Commitment in 2008-11.</p> <p>The development of distributed generation including renewables will require the upgrade or reinforcement of parts of the transmission or distribution system. The Government is working with Ofgem to ensure that these upgrades happen in a timely manner.</p>
Transport	<p>Transport currently accounts for 24% of the UK's greenhouse gas emissions and demand for transport is increasing.</p> <p>Forecasts indicate that road transport emissions will grow by 7% from 2000 to 2010.</p> <p>The annual average distance travelled by residents in Great Britain rose by 5% between 1992/94, but the number of walking trips fell by a fifth.</p> <p>The average emissions from new cars in the UK decreased by 10% between 95 and 2004, however the rate of improvement may have started to fall.</p> <p>The UK's strategy to reduce transport emissions includes Renewable Transport Fuels Obligation which requires 5% of transport fuel sold in the UK to come from renewable sources by 2010.</p> <p>Approaches to be used by Government to tackle transport emissions include:</p> <ul style="list-style-type: none"> • Reducing fossil carbon content of road transport fuels; • Improving fuel efficiency of vehicles; • Encouraging a move towards more environmentally friendly means of transport; • Promoting inclusion of aviation in emissions trading schemes and developing the evidence base for the possibility of including surface

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	transport in Emissions Trading Scheme (ETSs) of the future.
<p>Domestic</p>	<p>The number of households in England is projected to increase by 19% between 1996 and 2012. Regional variations indicated high growth in the south will less (10%) in the north.</p> <p>Micro generation – measures will include an £80m capital grant programme to tackle barriers to prevent widespread take up of technologies.</p> <ul style="list-style-type: none"> • Measures should include: • Advice to consumers; • Financial incentives; • Building standards; and • Voluntary agreements. <p>Energy Efficiency Commitment requires electricity and gas suppliers to achieve targets for promotion of energy efficiency in the domestic sector. Measures also refer to Building Regulations changes and the Code for Sustainable Homes.</p> <p>EU Energy Performance of Buildings Directive has been implemented in the UK since April 2006. It sets out minimum requirements for energy performance of new buildings and on the performance of large existing buildings undergoing major renovation. It requires the provision of energy performance certificates when buildings are constructed, sold or rented out and the display of these in public buildings over 1,000m². The Housing Act will deliver the Home Information Pack from June 2007 which will include information on energy efficiency measures.</p> <p>Improving domestic product efficiency is identified as an action.</p> <p>Energy Savings Trust to promote consumer engagement. EST is piloting the Sustainable Energy Network. This is a network of regional delivery agencies that aims to support national awareness raising of sustainable energy and to translate that awareness into practical action.</p> <p>Billing and metering will be addressed to include provision of consumption feedback through information on bills or via smart meters.</p> <p>Green Landlord scheme – reforming existing wear and tear allowance to make it conditional on energy efficiency.</p> <p>Fuel poverty – Extra funding of £300m between 2005 and 2008 to tackle fuel poverty under the Warm Front and other fuel poverty programmes. The Government estimates that by 2010 this measure could save up to 0.4MtC.</p>
<p>Industry</p>	<p>It is a key government policy to spend £80m in the next three years to support micro-generation technologies with the aim of encouraging manufacture at higher scale leading to low costs.</p> <p>There is a Marine Renewables Development Fund for R&D of wave and tidal power.</p> <p>Support for biomass heat sector will run for five years and will be worth at least £1—15m in England over the next two years.</p> <p>CHP – a consultation will be held on proposals to create a separated sector</p>

<p>Strategy Title</p>	<p>UK's Fourth National Communication under the United National Framework Convention on Climate Change</p>
	<p>for the EU ETS for existing good quality CHP. Also, eligibility for Renewable Obligations Certificates will be extended to include mixed waste plants which use good quality CHP.</p> <p>Carbon Abatement – capital grants available (£35m) to support demonstration technologies.</p> <p>Coal mine methane – Government working with the Coal Authority to develop a competitive grant scheme to support projects aimed at controlling coal mine methane emissions. Funding not presently available.</p>
<p>Agriculture</p>	<p>During 2000 the Common Agricultural Policy was reformed. This involved the creation of an integrated EU Rural Development Policy, which provided the basis for a shift of emphasis from production support towards environmental and rural development. The Government estimates that by 2010 this measure could save up to 0.68MtC.</p> <p>Government will seek to reduce nitrous oxide and methane emissions from agriculture. It is working towards the promotion of the use of anaerobic digestion for treatment of animal manures and the use of biogas.</p> <p>Energy efficiency – intensive pig and poultry farming sectors have been involved in climate change agreements since 2001 and the horticulture sector is now eligible and has agreed challenging energy reduction targets.</p> <p>The Strategy for Non Food Crops and Uses launched in November 2004, aims to promote and develop the use of renewable raw materials as energy crops or to replace other fossil fuel based products. Funding of around £2m per year is provided for research into the area. The Energy Crops Scheme introduced in 2000 supports farmers growing energy crops. Plantings under the existing Energy Crops Scheme are expected to lead to carbon savings of around 11ktC by 2010.</p> <p>The UK Forestry Standard (2004) provides criteria and standards for the sustainable management of UK forests and woodlands. A high proportion of UK forests have now been certified under the UK Woodland Assurance Standard. This allows the certified forests to be recognised by consumers as a sustainable resource. Woodland planted under the Woodland Grant Scheme will remove 3.5MtC between 2006 and 2020.</p>
<p>Commerce</p>	<p>Established a national registry for holding, transferring and acquiring EU allowances and Kyoto units.</p> <p>Implementation of EU Emissions Trading Scheme. Started Jan 2005. (Private sector interest in emissions trading and the Kyoto Mechanisms is considerable).</p> <p>Climate change levy – a take on the use of energy in industry, commerce and public sector. CCL rates will increase in line with current inflation starting 1st April 2007. Climate change agreements provide an 80% discount from the levy for sectors that agree to meet challenging targets for improving efficiency or reducing greenhouse gas emissions.</p> <p>Energy Efficiency Loan Scheme for SMEs provides interest free loans between £5,000 and £100,000 for up to four years for qualifying energy efficiency projects. The Government estimates that by 2010 this measure could save up to 0.1MtC.</p>
<p>Public Sector</p>	<p>Local government is uniquely placed to provide vision and leadership to local</p>

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	<p>communities, raise awareness and help change behaviours. In addition, through powers and responsibilities (housing, planning, local transport) they can have significant influence over emissions in their local areas. The government wishes to see a significant increase in the level of engagement by local government in climate change issues.</p> <p>Actions focus on local authorities which it is estimated can deliver savings of 0.2MtC in 2010 (best practice programme, investment in estates, partnership working with energy companies to promote energy efficiency measures to households and work with Local Government Associations and others to review existing guidance to local authorities).</p> <p>Sustainable Procurement – The Public Sector Efficiency Review for Energy is a project to generation £200m energy savings through developed innovation in energy procurement, improving the management of energy through better metering and clear billing and increasing conservation activity.</p> <p>Schools – the Sustainable Development Action Plan for Education and Skills (launched in 2003) will emphasise the sustainability and energy efficiency requirements for school buildings through a sustainable schools launch and consultation in 2006.</p> <p>Higher education – The Higher Education Funding Council for England published a strategy and action plan setting out how within the next ten years the sector will achieve sustainability and tackle climate change (2005).</p> <p>NHS – aims to reduce primary energy consumption to by 15% or 0.15MtC from a base year of 2000 by March 2010. It also aims to achieve a target of 35-55 GJ/100m3 energy efficiency for the healthcare estate for all new capital developments and refurbishments and that all existing facilities should achieve 55-65 GJ/100m3.</p>
AREAS OF POTENTIAL ADAPTATION	
Sea Level Rise	No direct reference.
Flooding	<p>Defra and EA fund a collaborative research programme on flood and coastal erosion.</p> <p>Foresight Future Flooding Study commissioned by the Office of Science and Technology identified that under baseline assumption of current levels of expenditure and approaches to flood and coastal management remaining unchanged, it was found that all scenarios would result in a substantial increase in risk. An integrated approach combining a portfolio of responses would provide significant cost savings over conventional defences and also enable a much more sustainable approach to risk and management to be realised.</p> <p>For example: adaptation is occurring both in terms of implementing adaptation actions and building adaptative capacity. Most examples are planned for example deliberately initiative in response to the need to adapt to the impacts of climate change, although there are many other drivers. Example of practice is the Essex Wildlife Trust which has undertaken the largest coastal realignment project in Europe, converting over 84 hectares or arable farmland to salt marsh and grassland to provide sustainable sea defences.</p>
Water Resources	The Government and UKCIP are establishing a Marine Climate Change Impact Partnership to develop a long-term multi-disciplinary approach to

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	<p>understanding the implications of climate change on the marine ecosystem. Purpose of the MCCIP is to provide a national coordinating framework that will facilitate transfer of high quality evidence on the impacts of marine climate change to the public, politicians, policy advisors and decisions makers.</p> <p>For Example: the majority of adaptation outputs are in the form of building adaptive capacity and few companies have yet begun to implement adaptation actions. Some companies are investing financial resources in infrastructure improvements such as sewage services, generally by UK and EU legislative requirements. This investment is a function of the high level of awareness of climate change in the water supply industry and potentially high susceptibility.</p>
Agriculture	<p>Inherently sensitive to climate. Government programme of research aims to raise awareness and promote uptake of sustainable adaptation strategies in the industry.</p>
Habitat, Biodiversity & Landscape	<p>Defra funds a research programme on biodiversity and climate change. For Example: improvements to the permeability of landscapes to facilitate rainwater dispersal, minimisation of further loss of semi-natural habitats; identification and safeguarding of areas with good existing adaptive capacity, supporting new habitat creation, securing more effective targeting of agri-environment schemes and translocation of species where necessary.</p>
Buildings and Construction	<p>Insurance – a recent report on the financial risks of climate change was launched in 2005 at an international conference. It outlined how climate change could increase the financial costs of extreme weather events around the world. Even small increases in the intensity of major storms could increase damage costs by at least two thirds by the end of the century.</p>
Transport	<p>Highways Agency business plan 2005-6 includes a programme of work connected with climate change including responses required for adaptation over the next 30 to 40 years. Networks Rail's Safety and Environment Plan 2003 notes adverse weather as a hazard and indicated that they will introduce a strategy to increase resilience of railway infrastructure to high winds, flooding and extreme temperatures, including research into impacts and recommendations to address it.</p>
Industry	<p>No direct reference</p>
How does this strategy contribute to the long term reduction of greenhouse gas Emissions?	<p>Critical information base presenting national priorities for emissions reductions and providing details of how the Government intends to achieve this.</p>
How does this strategy contribute to the delivery of adaptation actions?	<p>In terms of adaptation, the document provides some examples that are in place. More importantly however it identifies where research is being carried out and also where the Government intends to invest resources to respond to adaptation.</p>

D1.2 UK Climate Change Programme 2006

Strategy Title	UK Climate Change Programme 2006: Tomorrow's Climate Today's Challenge
Originator	Secretary of State for the Environment, Food and Rural Affairs
Published Date	March 2006
Target Area	UK
How the Strategy is Prepared	<p>The report is for the UK Climate Change Programme, it sets out the Government's aims and provides an Action Plan for achieving carbon savings. The Programme is designed to deliver the UK's Kyoto Protocol target of reducing emissions of the six greenhouse gases by 12.5% below base year levels over the commitment period 2008 to 2012. Its role also extends to moving towards the UK domestic goal to reduce carbon dioxide emissions by 20% below 1990 levels by 2010. It is also designed to help the UK cut carbon dioxide emissions by 60% by 2050.</p> <p>Specific sectoral targets for reduction in carbon dioxide up to 2010 (in MtC). Sectors include energy supply, business, transport, domestic, agriculture, public sector. It also includes a target for devolved administrations for 0.3MtC by 2010.</p>
Decision Making Processes	<p>The Programme has been presented to Parliament by the Secretary of State for the Environment, Food and Rural Affairs; to the Scottish Parliament by the Scottish Ministers; to the Northern Ireland Assembly and it has been placed with the Welsh Assembly Library.</p> <p>At the domestic level, Public Service Agreement (PSA) delivery plans, which are submitted biannually to HM Treasury, will be used to track progress. The PSAs include sustainable development and energy sector indicators. Annual (every March) DTI provisional estimates of carbon dioxide emissions are also used to monitor progress.</p> <p>Monitoring is carried out by the Sustainable Energy Policy Network (SEPN), which operated through a Ministerial Committee, an Advisory board, Strategy Group, working-level group and Interdepartmental Analysts' Group (IAG).</p> <p>Two Cabinet Committees have climate change as part of their business:</p> <p>Cabinet Committee on Energy and the Environment (EE) – remit to develop the Government's energy and environmental policies, to monitor the impact on sustainable development of the Government's policies, and to consider issues of climate change, security of supply and affordability of energy.</p> <p>Cabinet Committee on Sustainable Development in Government (EE(SD)). Remit to improve the Government's contribution to sustainable development through the conduct of its business, including through consideration of departmental sustainable development action plans; and to report as necessary to the EE.</p> <p>Government will produce a new annual report to Parliament on the level of greenhouse gas emissions in the UK and the steps the Government has been taking to reduce these. This will set out an indicative work plan for the following year.</p> <p>The Government is considering setting an annual carbon budget, setting up a national carbon account where carbon would be given a market value and position would be set out in monetary terms. This was considered by the Stern</p>

Strategy Title	UK Climate Change Programme 2006: Tomorrow's Climate Today's Challenge
	<p>review.</p> <p>Government will assess the role and status of regional stakeholder climate change partnerships including future funding options.</p>
Purpose and Aims of the Strategy	<p>The 2006 Climate Change Programme supports the generation of more electricity from renewable sources, improving incentives and removing barriers to development of renewable energy technologies, including micro-generation. It sets out the Government's commitments both at international and domestic levels to meet the challenge of climate change and the approach to strengthening the role that individuals can play, encouraging individuals to take action necessary to meet the Government's goals.</p> <p>Relevant International Aims:</p> <ul style="list-style-type: none"> • Progress agreements made at G8 Summit in Gleneagles and the Montreal climate change conference to strengthen the international regime. • Work with the World Bank and multilateral development banks to ensure proposed Clean Energy Investment Framework delivers significant new investment in low carbon energy sources, energy efficiency and adaptation to climate change in developing countries. • Support international collaboration and coordination to develop technologies. <p>Public Sector Aims:</p> <ul style="list-style-type: none"> • Introduce package of measures to drive additional action for Local Authorities to include an appropriate focus on action on climate change. • Set up new revolving loan fund of £20m for the whole of the public sector, to finance investment in energy efficiency. • Introduce new strategic targets for the central government estate in summer 2006. <p>Personal Actions:</p> <ul style="list-style-type: none"> • Introduce further measures and initiatives to encourage and enable individuals to understand their role and responsibility in tackling climate change. • Continue to support the essential work of the EST and Carbon Trust and other organisations that provide information and advice to individuals, businesses and local authorities. • Set out a plan for action on sustainable consumption by the end of 2006, in response to the Sustainable Consumption Round Table report due in Spring 2006. • Establish a new online information service (Environment Direct) to provide information on the environmental impact of a range of everyday products and services, and practical advice on sustainable lifestyle choices. • Provide up to £4m over three year to roll out a new package of measures to help thousands of community groups across England to take action on sustainable development, including climate change. • Enhance our new Climate Change Communications Initiative, to change

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	public attitudes toward climate change, above all at local, grass roots and regional level.
SECTORS THAT IMPACT ON GREENHOUSE GAS EMISSIONS	
Power Generation	<p>Energy Supply Sector</p> <ul style="list-style-type: none"> • Consult on National Allocation Plan for second phase of EU Emissions Trading Scheme to achieve carbon savings of between 3 and 8 MtC. • Spend £80m in between March 2006 and April 2009 to support Microgeneration technologies to encourage manufacture at higher scale leading to lower cost. • Provide £35m over four years for development of carbon abatement technologies and consult on the barriers to wide-scale commercial development of carbon capture and storage (CCS) and the potential role of economic incentives in addressing barriers. • Continued support for renewables under the Renewable Obligations and address barriers to take up. • Fully consider the treatment of CHP in the UKs National Allocation Plan for the second phase of the EU Emissions Trading Scheme.
Transport	<p>Introduce the Renewable Transport Fuel Obligation from 2008 to increase the uptake of bio fuels and ensure a long term framework which promotes additional investment.</p> <p>Continue use of fiscal instruments such as Vehicle Excise Duty and Company Car Tax to give incentives to purchase less polluting vehicles.</p> <p>Maintain momentum in the EU to secure agreement to the inclusion of aviation in EU ETS from 2008 or as soon as possible thereafter.</p> <p>Work strongly to achieve further commitments from vehicle manufacturers to improve fuel efficiency.</p> <p>Continue to promote carbon off-setting and lead by example to off-set emissions arising from central Government air travel.</p> <p>Launch initiative designed to strengthen consumer demand for energy efficiency, working with energy suppliers and through Local Authorities - £20m funding 2006-2008.</p> <p>More reliable consumer product information and effective standards for energy using products via voluntary agreements e.g. consumer electronics.</p> <p>Consider how to enable consumption feedback to households – improved billing and metering. £5m to help co-finance with energy companies a pilot study in use of smart meters and associated feedback devices.</p> <p>Maintain Energy Efficiency Commitment, Warm Front and Decent Homes schemes to meet fuel poverty targets.</p> <p>Support EST and the Climate Change Communications Initiative to raise awareness.</p>
Domestic	Report annually to Parliament on emissions, future plans and progress on domestic climate change.

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	<p>Set adaptation plan for the UK.</p> <p>Continue to take forward significant improvements already made to the Building Regulations in 'April 2006 to raise energy standards of new build and refurbished buildings.</p> <p>Introduce the Code for Sustainable Homes which will have minimum standards for energy and water efficiency with levels raised above the level of mandatory building regulations;.</p> <p>Seek to achieve substantially higher carbon savings from Energy Efficiency commitment in 2008-11 working with stakeholders to examine the scope to provide greater flexibility and incentives.</p> <p>Achieve additional 250,000 additional subsidised installation of home insulation to 2008.</p>
Industry	No direct reference.
Agriculture	<p>Promote resource efficient farm management.</p> <p>Examine the scope and feasibility of an emissions trading scheme for the agriculture and forestry sector.</p>
Commerce	<p>Continued use of the climate change levy and associated climate change agreements to encourage business to improve the efficiency with which they use energy.</p> <p>Maintain a strong package of support, advice and information measures to help businesses improve energy efficiency.</p> <p>Continue to make the EU Emissions Trading Scheme a central element o business sector's contribution to national goal.</p> <p>Keep policy mix under review to ensure that it continues to represent the most effective use of policy instruments to deliver emissions reductions.</p>
AREAS OF POTENTIAL ADAPTATION	
Sea Level Rise	No direct reference.
Flooding	Produce revised guidance, with the EA, on implementing flood and coastal erosion risk management measures, to ensure that adaptability becomes an integral part of all flood and coastal erosion management decisions.
Water Resources	No direct reference.
Agriculture	No direct reference.
Habitat, Biodiversity & Landscape	Government will work with UK Biodiversity Partnership to publish practical guidance for nature conservation managers and planners.
Buildings and Construction	Government will publish a revised guidance statement on the role of spatial planning in adapting to climate change.
Industry Transport	No direct reference.
How does this strategy contribute to the long term reduction of greenhouse gas	Provision of an action plan for how the UK will achieve carbon savings

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Emissions?	
How does this strategy contribute to the delivery of adaptation actions?	<p>Article 4(1(b)) of the United Nations Framework Convention on Climate (UNFCCC) Change, requires that all Parties to the Convention develop programmes for climate change mitigation and to facilitate adequate adaptation. In December 2004 Parties to the UNFCCC agreed to develop a five year structured programme of work on the aspects of impact, vulnerability and adaptation to climate change. At Montreal in December 2005, agreement was reached on the framework and initial actions for the programme were due to begin in 2006.</p> <p>The UK Adaptation Policy Framework (APF) will set out the appropriate responsibility and activities across a range of organisations by sector. The APF will provide a consistent approach to building adaptation into policies and a coherent way to identify cross-cutting risks and opportunities to assist in prioritisation of action across Government. It can be integrated with policies developed by organisations at every level of decision making. The Stage 1 will focus on priority sectors where climate change will have a significant impact or where coordination between Departments or with other bodies will be needed to make progress on adaptation. Stage 2, 2006, will involve a review of activities taking place. Stage 3, 2008, will identify areas where adaptation is not occurring and what incentives and assistance may be required to ensure that it is considered appropriately in future planning and development.</p> <p>The first APF was due to be published during 2006</p>

D1.3 Planning and Climate Change – Supplement to PPS1 Consultation

Strategy Title	Planning Policy Statement: Planning and Climate Change – Supplement to Planning Policy Statement 1. Consultation
Client/Originator	Department for Communities and Local Government: Planning – Resources and Environment Policy Division
Published Date	13 th December 2006 - Consultation ends 8 March 2007
Target Area	England - Housing building industry, developers, architects, construction companies, planners, energy efficiency specialists, environmental stakeholders and academics
How the Strategy is Prepared	<p>Consultation document prepared by DCLG to seek views and comments on a draft planning policy statement which, when finalised, will supplement PPS1 Delivering Sustainable Communities.</p> <p>Comments are being sought between 13 December 2006 and 8 March 2007. Part 6 of the consultation report sets out questions where views are sought, however other comments may be submitted.</p> <p>A summary of responses will be published by 8 June 2007</p>
Decision Making Processes	<p>On issue, will supplement PPS1, to provide overarching planning policies on the delivery of sustainable development through the planning system in England.</p> <p>Planning Policy Statements explain the statutory provisions of the planning system and provide guidance to local planning authorities (LPAs) and others on planning policy and the operation of the planning system.</p> <p>Local Authorities must take the contents of PPSs into account in preparing development plans and the guidance can be relevant to decisions on individual planning applications and appeals.</p> <p>A companion guide is currently being prepared.</p> <p>On issue, RPBs and LPAs should reflect the implications of the PPS in policies to ensure policies are consistent. If any omissions become apparent at consultation stage, RPBs and LPAs should, where it can be achieved quickly without causing any delays in document delivery, address these. More substantial omissions should be reviewed as early as possible.</p>
Purpose and Aims of the Strategy	<p>Sets out how spatial planning should contribute to reducing emissions and stabilising climate change (mitigation) and take into account the unavoidable consequences (adaptation). The consultation document is part of a wider package of actions being taken by DCLG to help delivery the Government's ambition of achieving zero carbon development.</p> <p>Aims to focus on national policy and to provide clarity on what is required at regional and local levels to ensure that decisions are made at the most appropriate level and in a timely fashion to delivery the urgent action needed.</p> <p>Key Planning Objectives:</p> <ul style="list-style-type: none"> • Make a full contribution to delivering the Government's Climate Change Programme and energy policies. • In enabling the provision of new homes, jobs, services and infrastructure and shaping the places where people live and work, secure the highest viable standards of resource and energy efficiency and reduction in carbon emissions. • Deliver patterns of urban growth that help secure the fullest possible use of

Strategy Title	Planning Policy Statement: Planning and Climate Change – Supplement to Planning Policy Statement 1. Consultation
	<p>sustainable transport for moving freight, public transport, cycling and walking; and, overall, reduce the need to travel, especially by car.</p> <ul style="list-style-type: none"> • Secure new development and shape places resilient to the effects of climate change in ways consistent with social cohesion and inclusion; • Sustain biodiversity, and in doing so recognise that the distribution of habitats and species will be affected by climate change; • Reflect the development needs and interests of communities and enable them to contribute effectively to tackling climate change; and • Respond to the concerns of business and encourage competitiveness and technological innovation. <p>The Government aims to achieve a common methodology for regions in monitoring and reporting on the expected carbon impacts of RSS as soon as possible. Until such time, regional planning bodies, as part of their approach to managing performance on carbon emissions, to produce regional trajectories for the expected carbon performance of new residential and commercial development. These should be set out in the RSS using a measurement based on 'average units/ amounts of floorspace'.</p> <p>Regional Planning Bodies should:</p> <ul style="list-style-type: none"> • Consider how the region's activities contribute to climate change and provide a framework for integrating policies for the development and use of land with other policies and programmes that influence the nature of places and how they function; • Ensure the spatial strategy is in line with applicable national targets, in particular for cutting carbon emission, and with regional targets developed through the regional economic strategy and sustainable development framework; • Consider the region's vulnerability to climate change, using the most recent scenarios available from UKCIP, and specifically the implications for built development, infrastructure and services and biodiversity; and • Work with neighbouring regions and countries to identify cross-regional concerns. <p>The draft PPS also requires regional and local monitoring focusing on key actions and outcomes that relate to the relevant spatial strategy, including emissions reductions showing performance against trajectories and renewables targets set in the RSS.</p>
SECTORS THAT IMPACT ON GREENHOUSE GAS EMISSIONS	
Power Generation	<p>Regional planning bodies should pay particular attention to the potential to build into new and existing development more efficient means of energy supply and increasing contributions from renewable and low-carbon energy sources.</p> <p>RPBs should focus substantial new development on locations where it can readily and viably draw its energy supply from decentralised energy supply systems based on renewable and low carbon forms of energy supply, or where there is clear potential for this to be realised.</p>

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	<p>RPBs should ensure opportunities for renewable and low-carbon source of energy supply and supporting infrastructure are maximised.</p> <p>RPBs should set regional targets for renewable energy in line with PPS22 and ensure their ambition fully reflects opportunities in the region and are consistent with the Government’s national target for 10% of electricity to come from renewable sources by 2010 and 20% by 2020.</p> <p>LPA’s should assess their area’s potential for accommodating renewable and low carbon technologies, including micro-renewables. Should pay particular attention to utilising and expanding existing decentralised energy supply systems and fostering the development of new opportunities for decentralised energy.</p> <p>LPA’s should give positive consideration to the use of local development orders to secure decentralised energy supply systems and renewable energy.</p>
Transport	<p>Regional planning bodies should pay particular attention to the location of major generators of travel, the effect of differing patterns of urban growth on the movement of goods and supply chains.</p> <p>RPBs should focus substantial new development on locations with good accessibility by means other than the private car.</p> <p>Development applications should create and secure opportunities for sustainable transport through the preparation of travel plans; provide for safe walking and cycling, including appropriate secure cycle parking and changing facilities; provision and management of car parking</p>
Domestic	No direct reference
Industry	<p>RPBs should recognise the potential of, and encourage, those land uses and land management practices that help secure carbon sinks; consider the potential for carbon capture and storage, and the need for supporting infrastructure, and help realise this potential.</p>
Agriculture	No direct reference
Commerce	No direct reference
Other	<p>RPBs should consider the likely performance of the RSS on mitigating climate change. This should be a key part of the sustainability appraisal, which should be used to identify and evaluate possible tensions or inconsistencies between current, or likely future, baseline conditions and securing RSS in line with the Key Planning Objectives of the Climate Change PPS.</p> <p>RSSs should provide ‘clear yardsticks for identifying trends in carbon emissions’. The Secretary of State will expect urgent consideration to be given to an early revision of the RSS spatial strategy and means of implementation.</p> <p>RPBs should assemble data and information on Climate Change within the region to inform the spatial strategy and should coordinate a programme of data collection and monitoring required to keep the spatial strategy under review.</p>
AREAS OF POTENTIAL ADAPTATION	
Sea Level Rise	No direct reference
Flooding	No direct reference
Water Resources	No direct reference

Strategy Title	Planning Policy Statement: Planning and Climate Change – Supplement to Planning Policy Statement 1. Consultation
Agriculture	No direct reference
Habitat, Biodiversity & Landscape	No direct reference
Buildings and Construction	<p>RPBs should consider the desirability of avoiding new development in those areas with likely increased vulnerability to climate change, particular where it is not viable to manage likely risks through suitable measures to provide resilience. RPBs should bring forward adaptation options for existing development in likely vulnerable areas.</p> <p>Development applicants should use landform, layout, building orientation and landscaping to, inter alia, maximise natural ventilation; provide public and private open space to offer accessible choice of shade and shelter; avoid creation of adverse local environmental conditions; secure SUDS; encourage waste water recycling and water harvesting;</p>
Transport	No direct reference
Industry	No direct reference
How does this strategy contribute to the long term reduction of greenhouse gas Emissions?	Provides a framework for regional and local planning authorities to influence how development contributes to national targets for climate change. Most importantly, the requirement for setting targets and for monitoring will ensure that the impact of planning policies on climate change will be evident. This evidence will be critical in informing future policies.
How does this strategy contribute to the delivery of adaptation actions?	Provides a clear policy direction for the use of adaptation methods for development, supplementing existing policies set out in other PPS documents such as PPS25.

D1.4 Planning Policy Statement 3: Housing

Strategy Title	Planning Policy Statement 3 (PPS3) Housing
Originator	Communities and Local Government
Published Date	November 2006
Target Area	England
How the Strategy is Prepared?	Planning Policy Statements (PPS) set out the Government’s national policies on aspects of planning in England. PPS3 sets out the national planning policy framework for delivering the Government’s housing objectives. This complements, and should be read together with, other relevant statements of national planning and housing policy (in particular PPS1: Delivering Sustainable Development and the forthcoming PPS on Climate Change).
Decision Making Processes	PPS3 and accompanying advice and guidance have been developed in response to recommendations in the Barker Review of Housing Supply (March 2004). The proposals draw on a range of research and consultation exercises since. The PPS and related advice and guidance replace previous policy and guidance in particular PPG3 Housing. The PPS should be taken into account by Local Planning Authorities (LPAs) and Regional Planning Bodies (RPBs) in the preparation of Local Development Documents and Regional Spatial Strategies.
Purpose and Aims of the Document	To underpin the Government’s response to the Barker Review of Housing Supply and the necessary step change in housing delivery, through a new, more responsive approach to land supply at the local level. Objectives Ensure that everyone has the opportunity of living in a decent home, which they can afford, in a community where they want to live. Planning will deliver: high quality housing that is well designed and built to a high standard; a mix of housing in all areas both urban and rural; a sufficient quantity of housing; housing development in suitable locations; and a flexible and responsive supply of land.
SECTORS THAT IMPACT ON GREENHOUSE GAS EMISSIONS	
Power Generation	When setting out the criteria for selecting suitable locations for new housing RPBs and LPAs should take into account where readily and viably energy supply can be drawn from decentralised energy supply systems based on renewable and low-carbon forms of energy supply, or where there is clear potential for this to be realised.
Transport	When considering design quality of proposed housing developments, should consider how well-connected the scheme is by public transport and whether it is accessible to community facilities and services and community, green and open space. Developments should take a design led approach to provision of car parking and to create streets that are pedestrian, cycle and vehicle friendly. When setting out the criteria for selecting suitable locations for new housing RPBs should take into account, inter alia, the contribution to be made to cutting carbon emissions from focusing new development in locations with good public

Strategy Title	Planning Policy Statement 3 (PPS3) Housing
	<p>transport accessibility and/ or by means other than the private car</p> <p>LPAs should consider potential to contribute to cutting carbon emissions from focusing new development in locations with good public transport accessibility and or by means other than the private car</p>
Domestic	<p>LPAs should seek sustainable and environmentally friendly new housing developments, reflecting the approach set out in the forthcoming PPS on climate change, including the Code for Sustainable Homes.</p> <p>When considering design quality of proposed housing developments, should consider efficient use of resources, during construction and in use, and seek to adapt to and reduce the impact of, and on, climate change.</p> <p>Make effective use of existing housing stock.</p> <p>National target to achieve at least 60% of new housing on previously developed land.</p>
Industry	No direct reference.
Agriculture	No direct reference.
Commerce	No direct reference.
AREAS OF POTENTIAL ADAPTATION	
Sea Level Rise	No direct reference.
Flooding	LPAs when identifying sites for housing development should consider, amongst others, physical and environmental constraints or risks associated with locations such as stability and flood risk.
Water Resources	LPAs when identifying sites for housing development should consider, amongst others, physical and environmental constraints or risks associated with locations such as protection of natural resources e.g. water.
Agriculture	No direct reference
Habitat, Biodiversity & Landscape	LPAs when identifying sites for housing development should consider, amongst others, physical and environmental constraints or risks associated with locations such as biodiversity.
Buildings and Construction	LPAs should plan for a mix of housing on the basis of the different types of households that are likely to require housing over the plan period. This will include current and future demographic trends and profiles, accommodation requirements of specific groups, in particular, families with children, older and disabled people
Transport	No direct reference
Industry	No direct reference
How does this strategy contribute to the long term reduction of greenhouse gas Emissions?	Highlights the importance of creating sustainable homes in sustainable locations. Highlights the need to promote access to distributed energy supplies and to ensure housing developments are located in accessible locations to reduce the need to travel, in particular by private car.
How does this strategy contribute	Identifies the in developing spatial strategies, constraints must be given consideration, including flood risk and impact on biodiversity, water supply and

Strategy Title	Planning Policy Statement 3 (PPS3) Housing
to the delivery of adaptation actions?	population requirements. While not explicit, these considerations will be important in the context of adaptation to climate change.

D1.5 Planning Policy Statement 25: Development and Flood Risk

Strategy Title	Planning Policy Statement 25: Development and Flood Risk
Originator	Communities and Local Government
Published Date	December 2006
Target Area	England
How the Strategy is Prepared?	<p>Planning Policy Statements (PPS) set out the Government's national policies on different aspects of land use planning in England. This PPS replaces Planning Policy Guidance Note 25: Development and Flood Risk, published in 2001, which is hereby cancelled.</p> <p>The consultation for PPS25 ran from 5 December 2005 to 28 February 2006. The Full Regulatory Impact Assessment and the Summary of Responses were published December 2006.</p>
Decision Making Processes	<p>The policies in this PPS should be taken into account by regional planning bodies in the preparation of Regional Spatial Strategies; by the Mayor of Greater London in relation to the Spatial Development Strategy in London; and, in general, by local planning authorities in the preparation of local development documents. They may also be material to decisions on individual planning applications. These policies complement other national planning policies and should be read in conjunction with Government policies for flood risk and water management, including those set out in Making Space for Water and forthcoming Water Framework Directive guidance.</p> <p>A supporting Practice Guide provides guidance on the implementation of the policies set out in this PPS.</p> <p>Following amendment to Article 10 of the Town and Country Planning (General Development Procedure) Order 1990, on 1 October 2006, LPAs are required to consult the Environment Agency on all applications for development in flood risk areas (except minor development), including those in areas with critical drainage problems and for any development on land exceeding 1 hectare outside flood risk areas.</p> <p>Planning applications should be supported by site-specific flood risk assessments as appropriate (in flood risk areas).</p> <p>The sequential approach should be applied at a site level to minimise risk by directing the most vulnerable development to areas of lowest flood risk, matching vulnerability of land use to flood risk.</p>
Purpose and Aims of the Document	<p>Objective of PPS25</p> <p>To ensure that flood risk is taken into account at all stages in the planning process to avoid inappropriate development in areas at risk of flooding and to direct development away from areas at highest risk. Where development is exceptionally necessary in such areas, policy aims to make it safe without increasing flood risk elsewhere and where possible, reducing risk overall.</p> <p>Reduce risk, safeguarding land needed for flood management, reducing risk from new development through location, layout and design, incorporating SUDS.</p> <p>Use opportunities offered by new development to reduce the causes and impacts of flooding, making most of green infrastructure for flood storage, conveyance and SUDS, re-creating functional flood plains and setting back defences.</p> <p>Managing flood risk should take into account the impacts of climate change.</p> <p>Regional Planning Bodies (RPBs) and Local Planning Authorities (LPAs) should</p>

Strategy Title	Planning Policy Statement 25: Development and Flood Risk
	<p>appraise risk, prepare Regional Flood Risk Appraisals or Strategic Flood Risk Assessments as appropriate. Applications in identified flood risk areas should include a Flood Risk Assessment submitted with the application.</p> <p>RPBs and LPAs should work with the Environment Agency and other operating authorities and stakeholders to ensure best use is made of expertise and information</p> <p>RPBs and LPAs should ensure spatial planning supports flood risk management policies and plans, River Basin Management Plans and emergency planning.</p>
SECTORS THAT IMPACT ON GREENHOUSE GAS EMISSIONS	
Power Generation	No direct reference.
Transport	No direct reference.
Domestic	<p>Local Development Documents should set out policies for the allocation of sites and the control of development which avoids flood risk to people and property where possible and manage it elsewhere, reflecting the approach to managing flood risk in the PPS and the RSS for the Region.</p> <p>Policies should recognise the positive contribution that avoidance and management of flood risk can make to the development of sustainable communities, including improved local amenities and better overall quality of life.</p>
Industry	<p>Local Development Documents should set out policies for the allocation of sites and the control of development which avoids flood risk to people and property where possible and manage it elsewhere, reflecting the approach to managing flood risk in the PPS and the RSS for the Region.</p>
Agriculture	<p>Local Development Documents should set out policies for the allocation of sites and the control of development which avoids flood risk to people and property where possible and manage it elsewhere, reflecting the approach to managing flood risk in the PPS and the RSS for the Region.</p>
Commerce	<p>Local Development Documents should set out policies for the allocation of sites and the control of development which avoids flood risk to people and property where possible and manage it elsewhere, reflecting the approach to managing flood risk in the PPS and the RSS for the Region.</p> <p>Policies should recognise the positive contribution that avoidance and management of flood risk can make to the development of sustainable communities, including improved local amenities and better overall quality of life. They should be integrated effectively with other strategies of material significance such as Regional Economic Strategies.</p>
AREAS OF POTENTIAL ADAPTATION	
Sea Level Rise	No direct reference.
Flooding	<p>Where climate change is expected to increase flood risk so that some existing development may not be sustainable in the long term, LPAs should consider whether there are opportunities in the preparation of Local Development Documents to facilitate the relocation of development, including housing, to more sustainable locations at less risk from flooding.</p> <p>Policies should recognise the positive contribution that avoidance and management of flood risk can make to the development of sustainable communities, including improved local amenities and better overall quality of life.</p>

Strategy Title	Planning Policy Statement 25: Development and Flood Risk
	<p>LPA should ensure that new development in flood risk areas is appropriately flood resilient and resistant, including safe access and escape routes where required, and that any residual risk can be safely managed.</p> <p>Where permitted development threatens to have a direct, significant and adverse effect on a flood risk area, or its flood defences and their access, or the permeability and management of surface water, or flood risk to occupants, the LPA should consider whether to make a direction under article 4 of the Town and Country Planning (General Permitted Development) Order 1995 (SI 1995/418).</p> <p>When new transport infrastructure is proposed, the possibility of building in flood management measures at the design stage should be considered.</p> <p>Developer contributions – where it is necessary to permit development that requires the provision of flood risk management, including defence and mitigation works, such provision will generally be funded by the developer. Local Development Documents should include general policies about the principles and use of planning obligations for flood risk management.</p>
Water Resources	No direct reference.
Agriculture	No direct reference.
Habitat, Biodiversity & Landscape	No direct reference.
Buildings and Construction	<p>Caravan or park-home sites intended for permanent occupation are regarded as 'highly vulnerable'. The instability of such structures places their occupants at special risk and they are likely to be occupied during periods when flood risk is likely to be higher. Sites intended for temporary occupation are also 'more vulnerable'. The Sequential Test and Exception Test should be used by decisions makers and Flood Risk Assessments should pay particular attention to the management of residual flood risk, flood warning arrangements and evacuation plans should be considered.</p> <p>New development should incorporate appropriate surface water drainage arrangements to manage surface water and the impact of the natural water cycle on people and property.</p> <p>Promote the use of SUDS.</p> <p>Surface water run off should be managed as near to its source as possible.</p> <p>Development should not normally be permitted where flood defences would not provide an acceptable standard of safety taking into account climate change. Planning authorities should take into account the need for access to maintain defences when considering planning applications in areas close to them.</p> <p>Lower floors of buildings in areas at medium and high probability of flooding should be reserved for uses consistent with uses set out in the PPS (Table D1, Annex D – these relate to probability of flood risk, for example in high risk areas, the functional flood plain: water compatible uses and essential infrastructure). Developments should seek opportunities to use multi-purpose open space for amenity, wildlife habitat and flood storage uses. Opportunities should be taken to lower flood risk by reducing the built footprint of previously developed sites and using SUDS.</p> <p>Where there is a low probability of limited shallow depth water depth water entry, but not severe inundation to buildings, the use of flood-resilient construction may</p>

Strategy Title	Planning Policy Statement 25: Development and Flood Risk
	be considered. DCLG to provide guidance.
Transport	No direct reference.
Industry	No direct reference.
How does this strategy contribute to the long term reduction of greenhouse gas Emissions?	Sets out how to a strategic spatial approach to avoidance and management of flood risk. Mitigation relates primarily to location and design of development in general and is not sectorally specific.
How does this strategy contribute to the delivery of adaptation actions?	Adaptation guidance for flood resilient construction will be produced in the near future by the DCLG. Primarily, adaptation to flood risk relates primarily to avoidance through informed land use planning decisions.

D1.6 Sustainable Communities Building for the Future

Strategy Title	Sustainable Communities: Building for the Future
Originator	Office of the Deputy Prime Minister
Published Date	5 February 2003
Target Area	Local authorities, businesses and residents in England
How the strategy is Prepared?	The Deputy Prime Minister launched the Sustainable Communities Plan (Sustainable Communities: Building for the Future) on 5 February 2003.
Decision Making Processes	Sets out the Government's programme of actions to focus attention and to coordinate the efforts of all levels of Government and stakeholders in bringing about development that meets the economic, social and environmental needs of future generations as well as succeeding now.
Purpose and Aims of the Document	<p>The Plan sets out a long term programme of action for delivering sustainable communities in both urban and rural areas. It aims to tackle housing supply issues in the South East, low demand in other parts of the country and the quality of public spaces.</p> <p>Key aims</p> <ul style="list-style-type: none"> • Ensure that all social tenants have a decent home by 2010 and improve conditions for vulnerable people in private accommodation; • Tackle low demand and abandonment; • A step change in housing supply to tackle housing shortages, especially in London and the wider South East; • Ensure that in tackling housing shortages that the countryside is protected and enhanced, avoiding urban sprawl; and • To accommodate the economic success of London and the wider South East and ensure that the international competitiveness of the region is sustained for the benefit of the region and the whole country.
SECTORS THAT IMPACT ON GREENHOUSE GAS EMISSIONS	
Power Generation	No direct reference.
Transport	No direct reference
Domestic	<p>From 2004 the Housing Corporation has been required, as a condition of grant, that the new homes they fund achieve BREEAM EcoHomes 'pass' standard. The objective was to raise this to 'good' over time.</p> <p>Government will work with a range of partners to encourage all house builders to aim for higher standards of sustainability. Keep Building Regulations under review and will continue to support Building for Life.</p> <p>The report stated that the Housing Bill will propose a requirement for home sellers to produce a home information pack which will promote energy efficiency by ensure all homebuyers have access to information on energy performance of the homes they are considering buying.</p> <p>Will consult on detailed fiscal proposals to encourage greater energy efficiency and take further action following the Energy White Paper to achieve a step change in energy efficiency.</p>

Strategy Title	Sustainable Communities: Building for the Future
Industry	No direct reference
Agriculture	No direct reference
Commerce	No direct reference
AREAS OF POTENTIAL ADAPTATION	
Sea Level Rise	No direct reference
Flooding	EA is committed to assist in the creation of sustainable communities in the Thames Gateway, particularly with regard to flood risk.
Water Resources	No direct reference
Agriculture	No direct reference
Habitat, Biodiversity & Landscape	No direct reference
Buildings and Construction	Achieving Decent Homes Standard for all. Important in particular for older people and ethnic minorities who are disproportionately affected
Transport	No direct reference
Industry	No direct reference
How does this strategy contribute to the long term reduction of greenhouse gas Emissions?	Limited relevance, however the strategy has set a valuable framework for more recent innovations including the issue of Part L of the Building Regulations and the development of PPS1 for the Development of Sustainable Communities. It has promoted the role of the regional bodies and strategies including the development of Regional Spatial Strategies which have statutory value and are key in the development of Regional emission reduction targets.
How does this strategy contribute to the delivery of adaptation actions?	As above

D1.7 Code For Sustainable Homes

Strategy Title	Code for Sustainable Homes. A step-change in sustainable home building practice
Originator	Department for Communities and Local Government
Published Date	December 2006
Target Area	UK
How the Strategy is Prepared?	Government Report
Decision Making Processes	<p>The Code will become the single national standard for sustainable homes, used by home designers and builders as a guide to development, and by home-buyers to assist in their choice of home.</p> <p>It will form the basis for future developments of the Building Regulations in relation to carbon emissions from, and energy use in homes, offering greater regulatory certainty to developers.</p> <p>The Code sits alongside the planning system and is closely linked to the Building Regulations, which are the minimum building standards required by law.</p> <p>According to Building a Green Future: Towards Zero Carbon Development, the Government Report of achieving low/zero carbon housing, the Code assessments should be introduced on a voluntary basis from April 2007, and become mandatory from April 2008. Although assessments will eventually become mandatory, the report suggests that achieving specific standards will be voluntary, except where public funding is involved.</p> <p>The Code sets out minimum requirements to achieve one star (see below) after which developers can choose which and how many standards they implement to obtain points.</p>
Purpose and Aims of the Strategy	<p>The Code is intended as a single national standard to guide industry in the design and construction of sustainable homes.</p> <p>The home design categories include:</p> <ul style="list-style-type: none"> • Energy/CO₂ • Water • Materials • Surface water run-off • Waste • Pollution • Health and well-being • Management • Ecology <p>The rating system is indicated by stars from one to six. One star is entry level above the level of the Building Regulations, six is the highest.</p> <p>It will complement the system of Energy Performance Certificates which is being introduced in June 2007 under the Energy Performance of Buildings</p>

Strategy Title	Code for Sustainable Homes. A step-change in sustainable home building practice
	Directive (requirement for energy performance certificates). It will offer developers a tool to differentiate their schemes from others.
SECTORS THAT IMPACT GREENHOUSE GAS EMISSIONS	
Power Generation	Sets target emissions rates for energy/CO ₂ – awards points for percentage improvement of Building Regulations Approved Document L (2006) Points awarded for at least 10% total energy demand is supplied from local renewable or more for low carbon energy sources of at least 15%
Transport	Points awarded fro cycle storage that is weather proof and secure for between 50% and 95% of all dwellings in a development
Domestic	<ul style="list-style-type: none"> • Inclusion of less pollution materials • Encourages household recycling • Reduced ecological footprint over traditionally built houses • Ensures that there is a site waste management plan in operation • Provides points for reduction in heat loss • Energy efficient internal lighting is rewarded • Use of natural drying space is promoted • Promotes the use of A rated white goods • Energy efficient external lighting • Considers environmental impact of materials and responsible sourcing • Considers potable water use • Considers surface water run off from site and flood risk • Promotes household recycling and composting • Minimises construction waste • Promotes use of insulating materials – where all insulating materials avoid the use of substances that have a global warming potential of 5 or more • Avoid NOx emissions from space heating and hot water systems • Sets minimum day-lighting standards • Provision of outside space that is partially private and is accessible • Promotes lifetime homes standards • Provision of home user guide • Encourages use of the Considerate Constructors Scheme • Considers ecological value and promotes ecological protection and enhancement • Minimise construction foot print of buildings

Strategy Title	Code for Sustainable Homes. A step-change in sustainable home building practice
	See one/three/six star examples, the report provides a breakdown of consumption levels on page 25
Industry	No direct reference
Agriculture	No direct reference
Commerce	Points awarded for provision of a home office
AREAS OF POTENTIAL ADAPTATION	
Sea Level Rise	No direct reference
Flooding	Contributes to surface water management
Water Resources	Reduced amount of internal potable water required Provides for measurement of water consumption
Agriculture	No direct reference
Habitat, Biodiversity & Landscape	Promotes management of biodiversity
Buildings and Construction	Lower running costs – implications where there are increased energy costs in the future Improved comfort – could make homes more comfortable in light of hotter summers, colder winters and extreme weather events, plus other climatic changes associated with climate change Improved well being, e.g. more natural light and adaptability for future needs
Industry	No direct reference
Transport	No direct reference
How does this document /strategy contribute to the long term reduction of GHG Emissions?	Promotes development of more energy efficient homes, and also to influence how people live to reduce energy requirements. This has considerable importance given the fact that domestic emissions account for some 27% of CO ₂ emissions in the UK
How does this document /strategy contribute to the delivery of adaptation actions?	By setting standards for life time homes, homes that are more comfortable and that are more energy efficient, the code promotes homes that will be more suited to future climatic changes. However, specific adaptation measures are not detailed in the document, and a review of the supporting guidance would be necessary to establish what exactly is proposed.

D1.8 The Planning Response To Climate Change

Strategy Title	The Planning Response to Climate Change. Advice on Better Practice
Originator	CAG Consultants, London Oxford Brookes University for ODPM
Published Date	September 2004 – This is very out of date and will have little value to the overall study as guide not a policy document. Much of the guidance is now covered by national policy- low priority...
Target Area	UK
How the Strategy is Prepared?	Research document
Decision Making Processes	The findings and recommendations in the report are those of the consultant authors and do not necessarily represent the views or proposed policies of the (then) ODPM
Purpose and Aims of the Strategy	Provides planning professionals with an overview of the current thinking and state of knowledge on the planning response to climate change. Should be used to assist local authorities implementing strategies to address climate change.
SECTORS THAT IMPACT ON GREENHOUSE GAS EMISSIONS	
Power Generation	Planning policies can set targets for renewable energy and CHP
Transport	Planning policies on parking, home zones, local cycle and pedestrian links, densities and mixed use policies can be used to reduce 'lifestyle' emissions Include policies for flooding to reduce vulnerability to severe weather events
Domestic	Design guidance should be used to complement Building Regulations to influence building fabric, form, orientation, layout, and size as well as the use of SUDS
Industry	No direct reference
Agriculture	No direct reference
Commerce	No direct reference
Other	No direct reference
AREAS OF POTENTIAL ADAPTATION	
Sea Level Rise	No direct reference
Flooding	Include policies for flooding to reduce vulnerability to severe weather events Policies on reducing flood risk, taking account of river catchments, estuary and shoreline management plans and consider management realignment and ensuring development is resilient to risk. Avoid areas of water stress. RPBs might consider principal areas where flooding issues are likely to be of regional significance and establish regional policies to discourage inappropriate development in high-risk areas
Water Resources	Opportunities to rethink water demand, storage and use techniques
Agriculture	Suggests policies for rural diversification and local food markets and sourcing.

Strategy Title	The Planning Response to Climate Change. Advice on Better Practice
	Planning should be involved with rural development plans and indicative forestry strategies
Habitat, Biodiversity & Landscape	<p>Opportunities to integrate land management for water resources, floodplain management, biodiversity and crop diversification.</p> <p>Policies on rural land uses, flood washlands, wildlife corridors, buffering capacity and water storage can be used. Planners can raise awareness of potential change to the landscape and possibility of value of change.</p> <p>Planning can link with biodiversity strategies and action plans, estuary and shoreline management plans and coastal habitat management plans</p>
Buildings and Construction	No direct reference
Transport	No direct reference
Industry	No direct reference
How does this document /strategy contribute to the long term reduction of GHG Emissions?	This research set out guidance for planners on how to mitigate against climate change before more structured and useful national guidance was available. It played an important role in informing the current emerging action plans for tackling climate change through the planning system
How does this document /strategy contribute to the delivery of adaptation actions?	<p>Recommends a decision making framework for planning policies on adaptation setting out the following stages:</p> <ul style="list-style-type: none"> • Scope of policy • Establish criteria for policy making • Assess risk • Identify and appraise options (asses risk) • Formulate policy • Implement and monitor

D1.9 Building A Greener Future: Towards Zero Carbon Development

Strategy Title	Building a Greener Future: Towards Zero Carbon Development
Originator	Department for Communities and Local Government
Published Date	December 2006
Target Area	England and Wales
How the Strategy is Prepared?	Government Report
Decision Making Processes	Advising the development industry of proposed measures to achieve zero carbon homes
Purpose and Aims of the Strategy	In order to reduce carbon emissions for new housing developments, the report proposes a tri-partite approach using: the planning system, The Code for Sustainable Homes, and The Building Regulations.
SECTORS THAT IMPACT ON GREENHOUSE GAS EMISSIONS	
Power Generation	Building Regulations should improve by 25% in energy/carbon performance by 2010 (Code for Sustainable Homes Code Level 3) and by 44% by 2013 (Code for Sustainable Homes Code Level 4). All new development should be zero carbon by 2016 (Code for Sustainable Homes Code Level 6)
Transport	No direct reference
Domestic	All new homes built or developed by Registered Social Landlords, English Partnerships or those with Housing Corporation or department Housing Growth Programme funding should comply with Code for Sustainable Homes Level 3.
Industry	No direct reference.
Agriculture	No direct reference.
Commerce	No direct reference.
AREAS OF POTENTIAL ADAPTATION	
Sea Level Rise	No direct reference.
Flooding	No direct reference.
Water Resources	No direct reference.
Agriculture	No direct reference.
Habitat, Biodiversity & Landscape	No direct reference.
Buildings and Construction	No direct reference.
Industry	No direct reference.
Transport	No direct reference.
How does this document /strategy contribute to the long term reduction of GHG	The Reports sets out a clear statement of intention by the Government of how it intends to pursue its goal to achieve zero carbon housing in the UK. This will be important in terms of reducing carbon and other greenhouse gas emissions to mitigate the causes of climate change.

Strategy Title	Building a Greener Future: Towards Zero Carbon Development
Emissions?	
How does this document /strategy contribute to the delivery of adaptation actions?	By driving the nature of the planning system and the Building Regulations the report also promotes adaptation.