

Annex 1

A CLIMATE CHANGE FRAMEWORK FOR YORK:

Creating a low carbon, sustainable city together

2010-2015

DRAFT CONSULTATION COPY

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Notes to readers:

This is a draft version of the Climate Change Framework for York (2010 – 2015). This document will undergo a series of consultations from April 2010 to June 2010, and including the Environment Partnership Board, Without Walls Partnership Board and City of York Council Executive. Formal public consultation will also be undertaken from June 2010 to September 2010.

Carbon modelling will take place between June and September 2010 to quantify the current actions (as outlined in this framework and accompanying Climate Change Action Plan (2010-2013), and to identify what actions and policies City of York Council and Partners will need to undertake in the future to meet the long-term targets associated to this Climate Change Framework. Interim targets to ensure York reaches its long term targets will also be identified and set through this modelling work.

Following the consultation stage, a final version of this framework (and accompanying action plan) will be published in September 2010. Both documents will reflect the carbon modelling, and will contain quantifiable current and future actions that will support the city to achieve its long-term targets.



Forward Joint:

- SIR RON and CLLR WALLER

TBC

Setting the scene, the challenges and a vision for York by 2050 Short term actions but longer term goal Partnership key to delivering this vision now and into the future.



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Executive Summary

The Climate Change Framework (CCF) is the overarching document that will enable York, over time, to accelerate actions to reduce carbon emissions across the city. It demonstrates the actions already on-going across the city and highlights the key areas the city needs to begin to drive forward in order to eventually reach a 80% reduction in CO2 emissions by 2050. The Framework is to be used by organisations, including the WOW partnership, to focus and drive coordinated action to tackle climate change.

This document:

- Highlights the overarching vision and headline objectives
- Commits the city to reducing greenhouse gas emissions including a 40% reduction in carbon dioxide emission by 2020 (based on a 2005 baseline) and a 80% reduction by 2050.
- Commits the city to better prepare and adapt York's communities and businesses for the likely impacts associated to a changing climate.
- Highlights the key work ongoing across the city
- Highlights the 10 key areas for York to work on now and in the future.
 These will create
 - 1. Sustainable homes
 - 2. Sustainable buildings
 - 3. Sustainable energy
 - 4. Sustainable waste management
 - 5. Sustainable transport system
 - 6. Sustainable low carbon economy
 - 7. Low carbon lifestyles
 - 8. Sustainable planning and land use
 - 9. Sustainable WoW
 - 10. Prepared York



1. Introduction

There is an overwhelming body of scientific evidence highlighting the serious and urgent nature of climate change. Climate Change is caused by natural and human induced factors. Natural causes such as the Earth's changing orbit, or variations in the sun's activity can cause changes in our climate. However, human activities such as burning fossil fuels which produce harmful greenhouse gas emissions such as carbon dioxide (CO₂) and changes in land use from the urbanisation of our towns and deforestation are also causing our climate to change.

The Intergovernmental Panel on Climate Change (IPCC) the world's most authoritative body on climate change, concluded that most atmospheric concentrations of the major greenhouse gases, carbon dioxide, methane and nitrous oxide have all increased significantly since pre-industrialised times because of human activities. These changes present a serious threat to human society and the natural environment. Such changes will have significant global and local impacts on human society and on the built and natural environment, with increases in drought and extreme rainfall and greater risks of abrupt changes in climate.

Average temperatures have increased in the UK since 1659. Summers have become hotter and drier; winters wetter and milder. Scientific models suggest that our climate will continue with this trend, resulting in some weather extreme events becoming more common, and others less common. Sea level will also continue to rise.

We have started to see the adverse affects of a changing climate. Over recent years the UK has seen significant flood events, in York in 2000, Boscastle in 2004, in Carlisle in 2005, and widespread across South Yorkshire, Humberside and Gloucestershire in the summer of 2007. These events tragically resulted in some loss of life and caused extensive flood-related damages to homes, industry and infrastructure.

Other notable events across the UK in recent years have included the record high temperatures during the 2003 heatwave and then again in 2006, and the tornadoes that affected Selsey Bill in 1998, Birmingham in 2005, and London in 2007, wreaking damage to infrastructure and buildings.

The government is committed to play its part in tackling climate change and passed in 2008 the Climate Change Act. This act binds England and Wales to an 80% reduction in carbon dioxide emissions by 2050.

At a regional level Yorkshire and Humber has a climate change plan and regional adaptation study that have been created to take positive steps to address climate change and better prepare and reduce the impact climate change will have across the region. Locally in York we are doing the same.



Action in York - The Sustainable Community Strategy

In York, the Without Walls Partnership (WoW) (- a group of organisations striving to improve quality of life for people in the city – known officially as the Local Strategic Partnership (LSP)) have committed to tackling climate change in York's Sustainable Community Strategy – a strategy that will improve the quality of life for everyone in the city over the next twenty years.

One overall aim of this strategy is to ensure that York is a Sustainable City and that York reduces its impact on the environment while maintaining the special qualities and enabling the city and its communities to grow and thrive.

As part of the Sustainable Community Strategy, and to create a sustainable York, the Environment Partnership, Board of the WoW have committed to tackling climate change and to producing a Climate Change Framework and Action Plan for York.

2. The Climate Change Challenge in York

Since 2005, York's carbon emissions from end users (emissions based on the energy consumption from businesses, the public sector and residential housing, along with fuel data on York's roads (excluding major roads such as motorways)) have begun to fall from 1.3 million tonnes of CO₂ emissions to just under 1.2 million tonnes of CO₂ emissions. Table 1 illustrates the decrease in emissions per sectors since 2005.

Year	From our industries & commerce CO2 (t)	From our homes CO ₂ (t)	From our roads CO ₂ (t)	Average per person (t)
2005	525, 000	463,000	312,000	6.9
2006	522,000	463,000	308,000	6.7
2007	434,000	444,000	309,000	6.1

Table 1. York's end use CO2 emissions by source 2005 – 2007(DECC 2009).

In 2007, York's carbon emission from end users was just under 1.2 million tonnes. The emissions originated from 3 major sources - 37% from our businesses and industries, 37% from our homes and 26% from road transport across the city (DECC 2009).

When measured as an average per person (per capita) CO₂ emissions, emissions from 2005 – 2007 have reduced from 6.9 to 6.1per capita CO₂ (t).

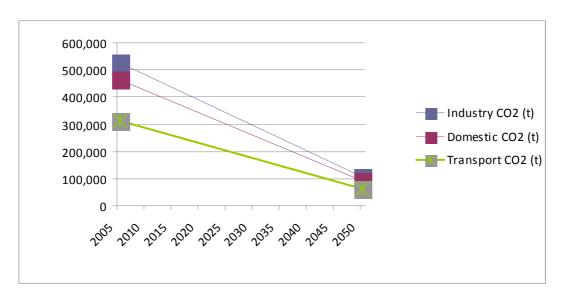
However, if in York we are to reduce CO₂ emissions in line with the national Climate Change Act (2008), an act designed to tackle the dangers of climate change, and which sets England a carbon reduction target of 80% by 2050 (based on a 1990 level), York's total end user CO₂ emissions from businesses, homes and transport would need to be just 260,000 tonnes of CO₂ (this figure for York is based on 2005 data and not 1990 level data. It is



however the most robust data set available for use in the absence of 1990 data).

As residents our CO₂ emissions for the average person will need to be closer to 1 tonne per person by 2050.

Graph 1 demonstrates the scale of CO_2 emission reduction, per sector , required for York to reach the Climate Change Act's 80% reduction in CO_2 emissions by 2050.



Graph 1. Carbon emissions, per sector, for York in line with the national 80% reduction target by 2050 (source DECC 2009) (Based on a 2005 baseline)

The challenge does not stop there. The previous data does not show the full picture.

If we include all direct and indirect CO₂ emissions associated to our everyday lives the challenge to reduce CO₂ emissions becomes even greater.

In 2009, the Stockholm Environment Institute calculated the average York Resident's Carbon Footprint and included the total amount of carbon emissions that resulted directly as well as indirectly from residents' consumption of goods and services (e.g. car use) as well as indirect emissions arising in the supply of the goods and services (e.g. transporting the raw materials to be manufactured).

The results showed that the average York resident, including direct and indirect emissions, has a carbon footprint of nearer 12.58 tonnes of carbon dioxide per year. Figure 1 illustrates this. This is over double the amount recorded from the single end user per capita data.

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 $^{^1}$ York's Greenhouse Gas footprint is 16.40 tonnes CO₂ equivalent per person and includes other key greenhouse gases such as methane and nitrous oxide. Equivalent CO₂ is the concentration of CO₂ that would cause the same level of warming as a given type and concentration of greenhouse gas.



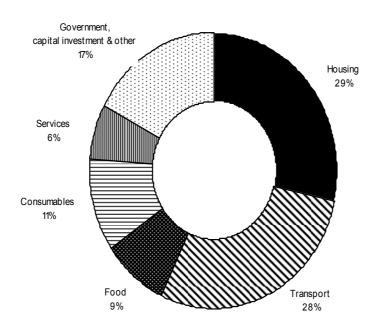


Figure 1. The carbon footprint of an average York resident (Stockholm Environment Institute 2009)

This comprehensive carbon footprint of an average York resident shows where York's residents' carbon emissions come from. They can be broken down by the themes of housing, transport, food, consumables and services:

Housing (3.62 tonnes) covers gas, electricity and fuel use in the home but also includes construction, rental and maintenance of dwellings.

Transport (3.54 tonnes) incorporates car use and maintenance, as well that of other private vehicles and public transport.

Food (1.08 tonnes) covers spending on food and drink and includes catering, eating out and alcoholic beverages.

Consumables (1.38 tonnes) covers annual expenditure on 17 categories of household consumption items including clothing, tobacco, newspapers and household appliances.

Services (0.78 tonnes) covers annual expenditure on 13 categories of service from insurance to financial advice to private education.

An additional 2.18 tonnes of carbon dioxide is added to every individual's footprint to complete the total footprint. These additional impacts cover



spending by Government and capital spending not addressed by the other themes. This includes the impact of public administration, health and education.

The York footprint of 12.58 tonnes of CO₂ is an average and there is great variation within the city with some residents' footprint being higher or lower than this level.

Understanding this data can assist the City of York Council and Without Walls Partnership to help residents to reduce the carbon footprint.

From the categories listed above in figure 1, there are four key areas where the Council and the Without Walls Partnership should focus on to make a real difference to reducing CO_2 emissions. These include transport, housing, food and public services. Together these account for over 70% of the footprint of York.

In order for York to play its part in helping the UK to meet its national 80% reduction in CO_2 , by 2050, York will need to look at a series of city-wide actions focussing on the areas where the city can have the greatest influence and impact (and including the 4 main categories from figure 1: transport, housing, food and public services).

The local authority does not have the power to implement changes on its own. For example, City of York Council has extremely limited control over the supply chains of all the goods and services consumed by York residents. It can however help to raise the awareness of such issues so that residents are well informed and can choose to change consumption habits.

3. The solutions to York's climate change challenge: A Climate Change Framework and Climate Change Action Plan for York

Tackling climate change requires international action as well as national and local action. Governments, businesses and organisations all need to take action, residents and communities too. We all can make a difference and make changes today that will contribute to tackling future climate change. Some actions are easier than others and some will require big changes to the way we currently live. However, inaction will results in even bigger changes, changes that we can, to some degree, help to minimise today.

To help York tackle climate change a climate change framework and action plan has been created. This Framework is the first of a series of documents that will enable York to coordinate and accelerate actions to reduce carbon and other emissions across the city.

The Climate Change Framework demonstrates the actions already on-going across York and highlights the longer term direction and key areas the city needs to address, initially up to 2013, but this will be reviewed and refined every five years up until 2050.



The Framework is to be used by organisations across the York to focus and develop a coordinated climate change action plan that residents, businesses, and statutory organisations like the Council and Without Walls Partnership can use.

The Framework is the overarching document driving the development of Climate Change Action Plan

The Climate Change Action Plan for York will be made up of a sub-set of specific themes with outcomes, targets and actions that will meet the Climate Change Framework's over arching ambitions and objectives. Figure 2 illustrates the composition of the Climate Change Framework and the Climate Change Action Plan for York. The Framework is the first of these documents and is the overarching document driving the creation of the action plan.

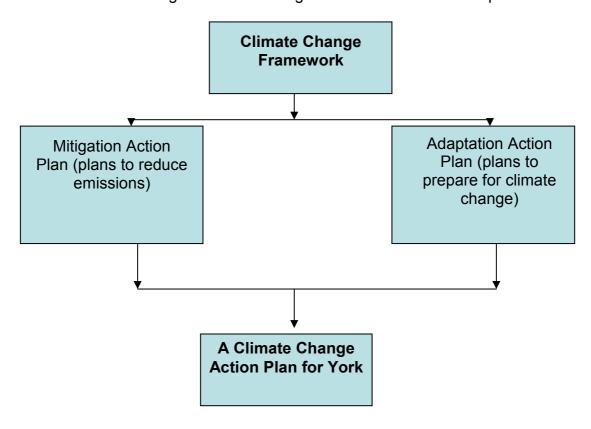


Figure 2. Composition of the Climate Change Framework for York.

The Climate Change Action Plan for York will be a combination of two specific action plans. The plans are broken into mitigation, actions that will reduce emissions from across the York, and adaptation, actions that will help York to better prepare and adapt to the unavoidable effects of climate change caused by increased concentrations of greenhouse gases from human activities. This is summarised below. Figure 3 illustrates this structure.



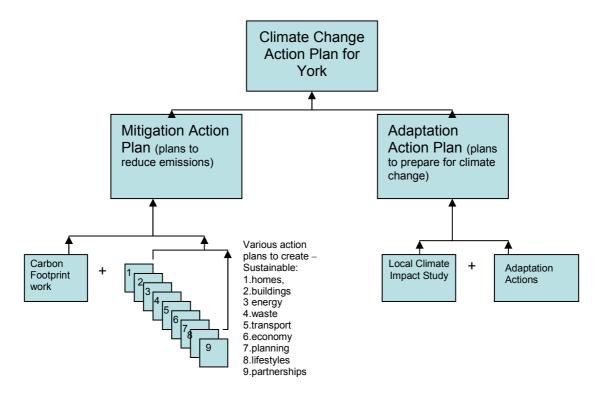


Figure 3 summarises the composition of the detailed action plans

Figure 5 illustrates the position of the Climate Change Framework and Action Plan, alongside the emerging Low Emission Strategy in the City's strategic ambitions to creating a Sustainable City under the Sustainable Communities Strategy. It also illustrates the role of delivery mechanisms such as Local Development Framework and Local Transport Plan 3. Both documents are vital in developing York's spatial planning and transport requirements, and both need to support and contribute towards the City's low emission ambitions.





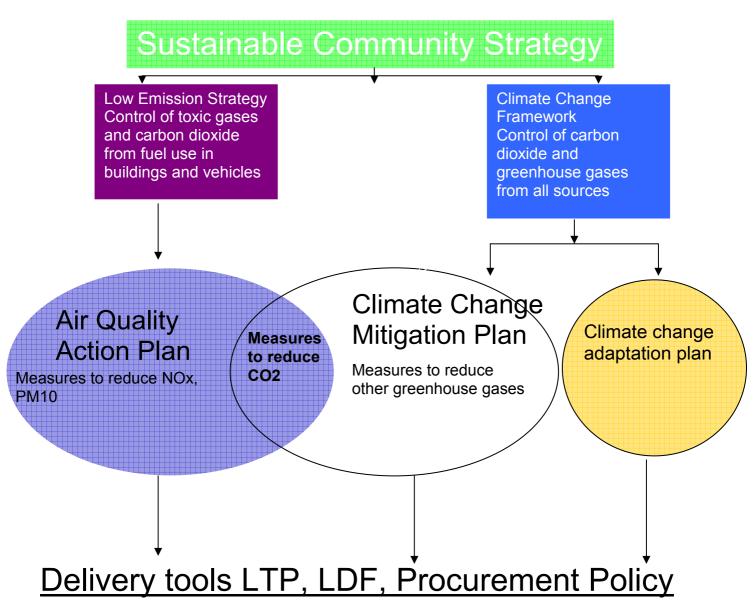


Figure 3. The strategic position of the Climate Change Framework and Action for York



4. The Climate Change Framework

Overall Vision

To reduce greenhouse gas emissions across York and better prepare and adapt York's communities and businesses for the likely impacts associated with climate change.

Headline Objectives

- To reduce York's carbon and other greenhouse gas emissions in line with government targets
- To coordinate carbon and other greenhouse gas emission reduction initiatives across York
- To coordinate actions to better prepare York for future climate change
- To raise awareness and understanding of climate change throughout the Without Walls Partnership, City of York Council, and within communities and businesses across York
- Contribute to the city's Sustainable Community Strategy and the creation of a sustainable, environmentally friendly city.

Headline targets

This climate change framework sets out and commits the city to long term, overarching targets associated to reductions in greenhouse emissions arising in York.

 York will look to reduce end user CO₂ emissions (emissions based on the energy consumption from the business and public sector and residential housing, along with fuel data for road transport use), within the boundaries of the city. It will:

' reduce York's carbon dioxide emissions (end user) by 80% by 2050 (based on a 2005 baseline)'

 York will also look to reduce its average resident's carbon footprint (direct and indirect emissions) and will:

' reduce York's average resident's carbon footprint by 80% by 2050 (based on a 2009 SEI baseline)

York will also adapt to a changing climate:

'City of York Council and Without Walls Partnership to have in place by 2050 effective measures that will better prepare York communities, businesses and vital infrastructure from the unavoidable effects of climate change caused by increased concentrations of greenhouse gases from human activities



- As CO₂ emissions are the largest contributing greenhouse gas towards climate change, this framework focuses and sets targets to address CO₂ emissions only. Targets will also be set in future frameworks, where data is available, for other greenhouse gases. To date, data is only available for CO₂ emissions from 2005 onwards.
- Intermediate targets will also be established in line with the Climate Change Act (2008) and in line with local targets set recently by the City of York Council to reduce CO₂ emissions in York by 40% by 2020 (based on a 2005 baseline).
- Modelling will also take place between June and September 2010 to quantify current actions and set interim targets towards achieving the 80% target by 2050, and the 40% target by 2020. This work will identify what actions and policies City of York Council and Partners will need to undertake in order to meet both the short and long-term targets associated to this Climate Change Framework.

The Climate Change Action Plan will take these headline targets of the and break them down into specific themes and outcomes. Each theme will contain a medium /long term outcome and a series of short term targets and actions to ensure the Framework's headline targets are met or are being progressed.

5. The 10 Key areas of the Climate Change Framework

In order to tackle climate change, and met the headline targets above, York will focus action in the following areas. These areas are chosen as the City of York Council and its Partners have control or influence over such areas.

These areas focus on creating:

- 11. Sustainable homes
- 12. Sustainable buildings
- 13. Sustainable energy
- 14. Sustainable waste management
- 15. Sustainable transport system
- 16. Sustainable low carbon economy
- 17. Low carbon lifestyles
- 18. Sustainable planning and land use
- 19. Sustainable WoW
- 20. Prepared Sustainable York

Areas 1- 9 address the major sources of greenhouse gas emissions (GHG) arising from across the city. The actions from these areas will follow the principles set out in the GHG management hierarchy (see below). This will ensure that when combined all actions in sections 1- 9 create an effective approach to reducing greenhouse gases.



The greenhouse gas management hierarchy

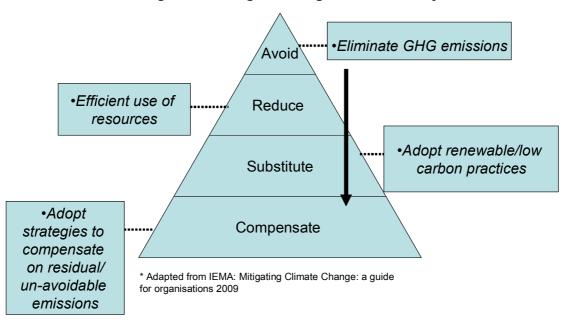


Figure 4. The Greenhouse Gas Hierarchy

Area 10 of the Framework look at how the city will prepare and adapt to the unavoidable effects of climate change caused by increased concentrations of greenhouse gases from human activities. This is know as climate change adaptation.

The following section describes the current actions in all 10 key areas of this framework, and identifies the future direction that York should travel in towards tackling climate change.

Here in York we will focus on and drive the creation of:

1. Sustainable homes

37% of York's carbon dioxide emissions come from our homes. Improving energy efficiency through measures such as loft and cavity wall insulation, can save CO₂ emissions that would otherwise originate from our homes.

What the city is currently doing:

- From April 2008 to March 2009 the City of York Council in partnership with the Energy Saving Trust advice centre for North Yorkshire and Humber provided verbal energy advice to over 2900 residents of York. An additional 4257 residents also completed an Energy Saving Trust Home Energy Check and received a free personalised report on saving energy in their home.
- A further 49 residents received advice on renewable energy, 933 on smarter driving, 976 on various energy efficiency grants and 29 on solid wall insulation.



- A variety of grants are also available to residents in York through the Energy Saving Trust advice centre for North Yorkshire and Humber and the Energy Partnership. From April 2008 to March 2009 185 energy efficiency grants were offered to residents across York it improve energy efficiency in homes. Energy Efficiency grants are also available to residents and landlords (*dependent on circumstances).
- From 2008-2010 the City of York Council's housing stock is being refurbished to a new high standard known as the Decent Homes Standards which, through schemes such as loft insulation, replacement boilers and rendering programmes, will save over 3000 tonnes of CO₂.
 - All new homes in York are designed and built to high environmental standards through the planning process and the City of York Council's Interim Statement: Sustainable Design and Construction (2007) including, for example, high levels of energy efficiency and, were feasible, on-site renewable energy generation.
 - The City of York Council and the Energy Partnership are currently running a project known as Hotspots to tackle fuel poverty and to look in particular at insulation and accessing cheaper fuel prices/reduce consumption in homes across York.
 - The City of York Council and the Energy Partnership also run an area based schemes to improve energy efficiency in homes across certain wards in the city.

What York needs to do to create sustainable homes in the future:

The city will have begun to dramatically reduce CO₂ emissions from domestic housing by accelerating city wide programmes and educational campaigns to increase the uptake of energy efficient measures such as loft and cavity wall insulation in existing homes (including social homes, and where viable, historic buildings) and in all new homes across York.

A list of planned actions to achieve sustainable homes in York is detailed in the Climate Change Action Plan for York 2010-2013.

2. Create sustainable buildings

In York 37% of CO₂ emissions come from the City's businesses and non-residential buildings. Ensuring that all existing and new premises are energy efficient and sustainably designed, built and operated is also vital in creating a sustainable city.

What we currently are doing:

- The City of York's Interim planning statement on Sustainable Design and Construction approved in November 2007 ensures that all new residential and non-residential developments built in York meet high sustainable design and construction standards and where feasible generate onsite renewable energy.
- The City of York Council is also leading the way and ensuring that its new buildings are designed to the highest environmental standards



such as the Eco-Depot at Hazel Court. This has a wind turbine and roof mounted solar hot water panels. The new Headquarters for the Council will also be designed to excellent sustainable standards and will generate at least 20% of the buildings energy needs from onsite renewable energy.

- The City of York Council has set a 25% reduction in CO₂ emissions by 2013 from its estate and transport fleet. A carbon management programme is in place to reach this target and an estimated 5800 tonnes of CO₂ saving projects will be carryout. Other organisations from across the city are doing the same such as University of York.
- The City of York Council is also committed to the national 10:10 campaign and has committed to a 10% reduction in CO₂ emissions across its buildings and fleet from March 2010 March 2011. It will also be encouraging the City's residents, schools and organisation to do the same in 2010.
- The City of York Council also has a draft Sustainable Schools Corporate Strategy that will help schools to reduce their carbon footprint.
- The City of York Council and Partners are also leading the way by ensuring that new leisure facilities and primary and secondary school buildings are designed to the highest environmental standards such as Yearsley swimming pool or Joseph Rowntree School. Other Organisations such as St Nicholas Fields are also leading the way in sustainable building design and operation with recycling, composting, rainwater harvesting and a wind turbine on site.
- The North Yorkshire Green Business Club promotes advice on energy efficiency improvements, grants and renewable energy across the city to businesses. Additional support is also currently available through the Business Link Yorkshire and Carbon Trust.
- Visit York are encouraging the tourisms industry in York to become more sustainable and are running a Green Tourism Business Scheme where participants work towards different levels of accreditation based on their green tourism credentials.

What York needs to do to create sustainable buildings in the future:

The city will have began to reduce CO₂ emissions from non- domestic buildings by accelerating city wide programmes and educational campaigns to increase the uptake of energy efficient measures and practices (including schools, and where viable, historic buildings) and in all new buildings.

A list of planned actions to achieve sustainable buildings in York is detailed in the Climate Change Action Plan for York 2010-2013.

3. Sustainable energy

In our homes, businesses and when we travel we use energy generated or fuelled by fossil fuels such as coal. When generating the energy, these fuels emit CO₂ emissions. In order to tackle climate change we



need to dramatically reduce this dependency and dramatically reduce all polluting emissions we generate from the energy we use daily. We need to opt for lower polluting forms of energy that reduce the detrimental impacts on the environment. We need to look for local solutions such as wind, solar, biomass/biofuels, ground and air sources and district wide heating schemes.

What we currently are doing:

- The City of York Council, Energy Saving Trust Advice Centre, Energy Partnership currently promote the up-take of home energy efficiency improvements; free home energy checks, renewable energy and associated grants across the city through the Energy Saving Trust Advice Centre.
- The City of York Interim planning statement on Sustainable Design and Construction (2007) ensures that all new residential and non residential developments built in the city meet high sustainable design and construction standards, and where feasible, generate onsite renewable energy.
- City of York Council is undertaking a Renewable Energy Strategic Viability Study for York. This will support the LDF's Core Strategy and its evidence base for renewing renewable energy and CO₂ reduction targets. It will also identify local viability and potential for renewable and low-carbon technologies in York and will illustrate the potential such technologies will have in the future to support the city's sustainable ambitions.
- City of York Council is developing a Low Emission Strategy and supporting supplementary planning guidance on this to ensure that all new developments, in the future, reduces the amount of emissions they produced, and that these developments do not contribute to climate change or declining air quality across the city. The LES will also focus on low emission transport options for York.
- City of York Council is leading by example and has set itself high sustainable and renewable energy targets (at least 20%) for new schools and buildings it constructs and operates. For example the eco-business centre in York is heated using ground-source heating and has its own wind-turbine which provides some of the building's electrical power.

What York needs to do to create sustainable energy generation in the future:

The city will have began to understand the potential for low carbon, renewable, localised sources of energy generation, and will have begun to reduce York's reliance on fossil fuels for energy generation.

A list of planned actions to achieve sustainable energy generation in York is detailed in the Climate Change Action Plan 2010-2013.

4. Sustainable waste management

The disposal of waste contributes to climate change both directly through the production of greenhouse gases such as methane when



organic waste begins to breakdown and biodegrade, and indirectly through the production of CO₂ emissions from the use of energy to sort and transport unwanted waste. Energy is also used to extract, manufacture and transport new products, which also contribute to CO₂ emissions. If we reduce, reuse and recycle waste we can reduce methane and CO₂ emissions from waste across York.

What we currently are doing:

- City of York Council have implemented kerbside recycling collections to 73,050 households
- City of York Council have Introduced alternate week collections to 63,700 households
- City of York Council have Implemented kerbside recycling collections to 74 schools
- City of York Council have achieved 45.13% recycling/composting rate for 2008/9
- City of York Council have achieved average municipal waste recycling and composting rate of 69.32% at the Household Waste Recycling Centres (2008/9)
- City of York Council have average 173kg of dry recyclables collected per household. This compares favourably to national data published in recent WRAP Kerbside recycling report.
- City of York Council have reduced kilograms of household waste collected per head of population from 538.54kg in 2006/7 to 512.25 kg in 21007/8. This represents a 4.88% reduction. (to be updated April 2010)
- The above work is delivered through the City of York Council's Waste Management Strategy
- The City of York Council's also has a Waste Minimisation Strategy and this includes the promotion of real nappies and re-useable bags.
- City of York Council work closely with the York and North Yorkshire Waste Partnership on a variety of strategies such as the "Let's Talk Less Rubbish" Joint Municipal Waste Management Strategy for York and North Yorkshire County Council and the District Councils within North Yorkshire.
- City of York Council also works closely with the York and North Yorkshire Waste Partnership on a variety of waste minimisation campaigns. These include promoting home composting, reducing junk mail and the national campaign Love Food Hate Waste (reducing food waste) and Choose 2 Reuse (donating, buying and volunteering at charity shops).
- City of York Council is also committed to the Zero Waste Places Standard scheme. This initiative will develop innovative and exemplary practice in sustainable waste management where waste is reduced and resources are conserved, reused and recycled.
- The Council through its More for York efficiency programme has invested in route optimisation software that will improve route efficiency, save fuel and reduce carbon emissions.



 The City of York Council also supports community led waste initiatives and the York Rotters who encourage residents to compost and minimise the amount of waste they create.

What York needs to do to work towards creating a sustainable waste management system in the future:

The city to continue to reduce greenhouse gas emissions resulting from the management of York's waste and to minimise waste and conserves, reuses and recycle resources. This work will also complement the city's Zero Waste Places ambition to reduce the environmental impact of waste.

A full list of planned actions to achieve the continued development of a sustainable waste management system are detailed in the Climate Change Action Plan 2010-2013.

5. Sustainable transport system

26% of York's carbon emissions come from transport. The City of York Council and its Partners are striving to reduce this figure by reducing the need to travel, and where people do have to travel, make them less reliant on their cars by walking, cycling and taking public transport. They are also striving to help businesses and residents to drive more fuel efficiently and to lift share more frequently.

What we are currently doing across York:

- York has a five-year Local Transport Plan 2006-2011 (LTP2), which the City of York Council produced in 2006 to tackle congestion and improve accessibility, road safety, and air quality for the city. It also contains schemes that address issues such as the development of an integrated transport network, encouragement of modal shifts away from the use of private car to sustainable transport modes such as public transport, walking and cycling.
- City of York Council and Partners are creating 3 new Park and Ride sites across the city to reduce congestion and pollution in the city centre.
- To encourage and increase bus use, City of York Council and Partners have improved bus stops across the city, and installed equipment to give buses priority at traffic signals.
- To encourage the use of public transport the City of York Council and Network Rail are developing a proposal for a new railway station at Haxby.
- City of York Council and Partners are promoting and supporting multimodal schemes such as improved facilities for cyclists and pedestrians.
 Such work includes a new school safety zone at Millfield Lane.
- To encourage more walkers in the city, City of York Council and partners have improved footways and space for pedestrians through minor improvement schemes such as the footway-widening scheme at Walmgate near Walmgate Bar.



- To encourage more cyclists, City of York Council and partners have improved cycling facilities across the city including, for example, the Beckfield Lane Cycle Route and the cycle route on Water End.
- To encourage parents and children to walk or cycle to school, City of York Council promotes schemes to provide safe routes to schools across the city and provide cycle storage facilities at schools. For example, Phase 2 of the safe route to Archbishop Holgate's School was completed and five primary schools received cycling parking installations.
- To support cycling in the city, City of York Council applied for and successfully secured funding to devise and implement 'Cycling City York 'a major programme to encourage more cycling across the city.
- Local Transport Plan 2006-2011 (LTP2), will be replaced by 2011 with Local Transport Plan 3 (LTP3). This is currently being developed. One of the objectives will be to deliver quantifiable reductions in greenhouse gases within the cities networks. This will also link into the emerging Low Emission Strategy that will look to reduce emissions from transport for not only CO₂ but for Nitrogen Oxides and Particulates.

What York needs to do to work towards creating a sustainable transport system in the future:

The city to continue to implement measures to help people make smarter, sustainable travel choices, supported by a comprehensive, low emission, sustainable transport network. This will be achieved by the emerging Low Emission Strategy, Local Transport Plan 3 and the Local Development Framework (including the Core Strategy). All will help deliver quantifiable reductions in greenhouse gas emissions and other harmful pollutants.

A full list of planned actions to achieve the continued development of a sustainable transport system are detailed in the Climate Change Action Plan 2010-2013.

6. Sustainable low carbon economy

Here in York businesses need to play a major role in reducing the city's carbon emissions. Most businesses currently produce a lot of unnecessary waste, consume vast amounts of energy generated from polluting fuels such as coal, and are resource inefficient. As a city we need to create low carbon businesses who produce and procure sustainable goods and services, and who are reducing their energy consumption, saving on their fuel costs and carbon emissions. We need to have businesses who have minimised the amount of waste generated, maximised the amount of waste reused and recycled, and who are beginning to raise awareness of climate change. Such businesses will also be actively encouraging and promoting walking, cycling, bus travel and lift share within their organisations and to their customers/clients.



What the city is currently doing

- The North Yorkshire Green Business Club promotes advice on energy efficiency improvements, grants and renewable energy across the city to businesses and the Without Walls Partnership. Additional support is also currently available through the Business Link Yorkshire and Carbon Trust..
- The Without Walls Partnership are also supporting businesses and helping them tackle climate change. A York specific package including web-based support is being created to summarise the existing support available. The support will also look to promote sustainable design, new technologies, cost saving measures and advice on adapting to a changing climate. There are also a number of businesses already making great steps towards becoming more sustainable and this will be promoted and showcased.
- The Without Walls Partnership including key partners such as Higher York have created a Green Jobs Task Force and associated action plan which will promote low carbon development, demonstrate leadership in the reshaping of low carbon services across York, work with employers and skills providers to provide the necessary skills to support a green jobs sector, and will identifying and supporting innovation across the city.
- Higher York have developed a Construction Academy at the University
 of York's Heslington East Campus. The Academy looks to engage
 construction companies with local communities and the city to support
 education, skills and employment; the green agenda including green
 jobs, transport and renewable energy and green procurement practices
 and the ongoing development of skills and jobs for local people on the
 sites that are developed.
- City of York Council has commissioned a renewable energy feasibility study highlighting the potential for generating energy from renewable sources in the city. Such a study is vital in guiding York towards low carbon economy as it will hopefully led to the develop of renewable energy generation projects across York (including projects for the commercial sector).
- Visit York are encouraging the tourisms industry in York to become more sustainable and are running a Green Tourism Business Scheme where participants work towards different levels of accreditation based on their green tourism credentials.

What York needs to do to work towards creating a low carbon economy in the future:

The city to have accelerated programmes and educational campaigns to support businesses and organisations to reduce carbon emissions and waste across their operations, fleet and workforce. The city's economic strategies and spatial plans must also support the targets of this framework and action plan and the transition to a low carbon economy.



A full list of planned actions to achieve the continued development of a low carbon economy are detailed in the Climate Change Action Plan 2010-2013.

7. Sustainable low carbon lifestyles

York also needs its residents to make changes today to reduce our carbon footprint and combat climate change. As residents we can all reduce our footprint by reducing the amount of energy we use in our homes and through smarter transport choices such as walking and cycling. We can also choose to reuse, recycle and compost more of our waste and to use less and buy more locally produced goods.

What the city is currently doing

- There is a variety of projects already ongoing across the city to support residents reduce their carbon footprint. Some of these actions are mentioned above and below in other action areas and illustrate the support and guidance that is already available to residents in areas such as home energy efficiency, renewable energy, sustainable design and construction, sustainable waste management and recycling and smarter, sustainable travel choices. Tops tips for actions that residents can take today can be found at the rear the Climate Change Action Plan 2010-2013. The Council and Without Walls websites are also full of guidance and advice. There is also a Sustainable City leaflet available with comprehensive advice for residents and businesses.
- The Environment Partnership is also running a 15-month Green Street Challenge ,funded by the Without Walls Partnership Local Authority Delivery Fund and co-ordinated by the Stockholm Environment Institute. This campaign challenges up to 500 residents to reduce their carbon footprint. Advice and guidance are offered to participants for a 6 month period to support households to cut their CO2 emissions by 10%.
- Also through the Without Walls Partnership Local Authority Delivery Fund, and co-ordinated by the Friends of St Nicolas Fields Environment Centre, is the Sustainable City Schools programme. This programme is helping schools and their local communities to reduce their carbon footprint and tackle climate change.
- The city holds various events such as Farmers' markets and festivals to promote local food and produce.
- The city offers schemes such as allotments for residents to use to grow food

What York needs to do to work towards creating low carbon lifestyles in the future:

York residents to be well informed and living a more greener, sustainable lifestyle where people save energy in their homes, reduce, reuse and recycle waste, walk and cycle, use public transport, grow their own food and buy local produce.



A full list of planned actions to achieve the continued development of low carbon lifestyles across York are detailed in the Climate Change Action Plan 2010-2013.

8. Sustainable planning, land-use and agriculture

The planning system in York can have a great impact on reducing present and future CO₂ emissions. It also can play a vital role in creating sustainable communities where by buildings are built to the highest sustainability standards and energy demand is low and met from localised, renewable or low carbon sources. These communities are also thriving, healthy, inclusive, environmentally friendly and well served and accessible. The planning system can also help York to prepare better and adapt to future climate change by making sure the city's new developments are designed to cope with a changing climate.

Our natural environment in York and in all new developments can also play a role in tackling climate change by absorbing and removing carbon from the atmosphere, providing shelter for flora and fauna, reducing pollution, and providing shading in the summer. Open green spaces across any city can also reduce the impacts of climate change by slowly releasing water, and thus, reducing flood risks at times of high intensity rain storms. Other benefits of open green spaces are considerable. In addition to providing a place for relaxation, education, exercise, cultivation and for the well being of people, they also provide refuge for wildlife and plants displaced through new developments or in a changing climate.

Agriculture is also responsible for generating CO₂ emissions through carbon intensive farming practices, it too needs to be part of the solutions for combating climate change in York.

What the city is currently doing:

- The City of York's emerging Local Development Framework (LDF) will set out the spatial requirements of a city that strives to be an environmentally friendly city. The LDF will set out both the level and broad location of growth in York over the next 20 or so years. As such, one of its main aims is the creation of sustainable communities that are mixed-use and compact developments in accessible locations, which reduce the need to travel, promote and contribute to walking, cycling and public transport initiatives and developments that are sustainably designed and constructed and fuelled by localised low carbon or micro generation renewable energy sources.
- The City of York Draft Local Plan policy GP4a and associated supplementary planning policy guidance (Interim Planning Statement Sustainable Design and Construction 2007) currently ensure that all new residential and non residential developments built in the city meet high sustainable design and construction standards, reduce carbon emissions, and where feasible, generate onsite renewable energy. These



requirements are assessed through methods know as the Building Research Establishment Environmental Assessment method (BREEAM) for non-domestic dwellings and Code for Sustainable Homes for all domestic dwellings.

- The City of York Draft Local Plan also requires that no planning permissions is granted in areas of high flood risk as determined by the Environment Agency.
- The City of York current Draft Local Plan policy T13a requires developments which are likely to employ more than 30 employees, or a residential site with more than 20 units, to submit a travel plan including; modal split targets, time scales, measures and sanctions to be taken to meet these targets as well as measures to monitor the effectiveness of the plan.
- The City of York Council produce development briefs for large-scale development sites such as Derwenthopre, Germany Beck, Castle Piccadilly, Nestle South and Terry's. Such briefs address the issues of climate change by stating their requirements to reduce the ecological footprint of new development and by requiring a Sustainability Statement that meets all of the requirements under City of York Draft Local Plan, policy GP4a and associated supplementary planning policy guidance (Interim Planning Statement Sustainable Design and Construction 2007).
- Policy L1 of the Draft Local Plan also requires the provision of public open space, and address the creation of open space, habitats for species and ensures that drainage capacity is adequate and that flood risk and surface run off is not increased, and where possible, reduced across the city.
- Through the City of York's emerging Local Development Framework, City of York Council has undertaken a Biodiversity Audit and Biodiversity Action Plan. The Audit will review the biodiversity value of existing and potentially new locally significant wildlife sites (SINCs). The baseline information set out in the audit will be used to prioritise further action through a Biodiversity Action Plan which will act as a framework for biodiversity issues within York.
- Through the City of York's emerging Local Development Framework's Core Strategy a strategic approach to green infrastructure is being taken. The Council intends to adopt a Green Infrastructure Strategy Supplementary Planning Document (SPD) which will link to and expand on the Core Strategy policy and will be a flexible means of setting out the detailed objectives, recommendations and actions for green infrastructure in York.
- Through the City of York's emerging Local Development Framework's Core Strategy a strategic Low Emission Strategy and Supplementary Planning Document will be adopted to protect air quality across York.

What York needs to do to work towards creating sustainable planning, land-use and agriculture in the future:

Ensure that the emerging Local Development Framework (including the Core Strategy) for York assists in the creation of an environmentally



friendly city that reduces the ecological and carbon footprint of York. In addition, York should ensure the protection and enhancement of the natural environment and maximise the role it can play to help the city tackle climate change and better prepare for a changing climate. The impact of farming and agriculture should also be investigated to help this carbon intensive industry in York to help combat climate change.

A full list of planned actions to achieve sustainable planning, land-use and agriculture are detailed in the Climate Change Action Plan 2010.

9. Sustainable WoW

The Without Walls Partnership (WoW) is made up of public and private organisations from across York. Collectively this group can play a vital lead role in cutting CO₂ emissions in York. It can also assist the city by coordinating actions from across its partnership that will better prepare York for future climate changes.

What the WoW is currently doing:

- The WoW in the Sustainable Community Strategy (see section 1 page 5) is committed to creating a sustainable York, and to the creation of this climate change framework and associated action plan for York (010 2013).
- The WoW have recently funded a series of programmes to reduce CO₂
 emissions across the city, including schemes to support schools,
 community projects to support residents to reduce their carbon footprint,
 and community outreach schemes to promote energy efficiency and
 reduce fuel poverty.
- The Without Walls Partnership is looking into supporting businesses and helping them tackle climate change. A York specific package including web-based support is being investigated to summarise the existing support available to businesses. There are also a number of businesses already making great steps towards becoming more sustainable and this too will be promoted and showcased across the city.
- The WoW Partnership, including the Economic Development Partnership, Lifelong learning Partnership, including Higher York, and the Environment Partnership Board are investigating the feasibility of increasing the skills needed to generate a green sector in the City. A Green Jobs Task Force has been created to oversee this work.
- The WoW Partnership is assisting the City of York Council to guide the development of the Local Development Framework and Core Strategy that will reduce the ecological and carbon footprint of York in line with the WoW's Sustainable Community Strategy.
- The WoW Partnership have received climate change presentations.
- The WoW Partnership with City of York Council is compiling a local climate impact study for York. This study will help the city to understand its present and future vulnerability to a changing climate. The WoW will then develop actions with Partners across the city to ensure York is prepared for a changing climate.



What WoW needs to do to work towards in the future:

Drive forward carbon reduction and climate change adaptation actions across the partnership and the wider communities of York.

A full list of planned actions for the WoW are detailed in the Climate Change Action Plan 2010.-2013

10. Preparing for climate change

As a city we can dramatically reduce our CO₂ emissions and help to tackle climate change in the future. However, we need to also prepare for some of the changes that will happen anyway due to actions we have already taken and the emissions we have already emitted.

What the city is currently doing

- The city of York council and the Without Walls Partnership is committed to preparing and adapting the city to a changing climate and currently is preparing a local climate impact profile to understand the likely impacts of climate change for York up until 2050. City of York Council are looking at key areas of risk and the major actions that need to be taken in the coming years. A citywide, in-depth action plan will be created to ensure York begins to better prepare for future climate change. This action plan will be for York agencies and organisations to action and for them to ensure York can minimise the impact climate change might have on the city's communities, businesses, utilities, the built and natural environment and the emergency services.
- Residents can also be better prepared, especially around the risk of flooding. Advice is already issued by City of York Council and key agencies, such as the Environment Agency, on what to do in a flood situation. Residents can also find out how to protect their homes through the Environment Agency. Residents in a flood-risk area can also get warnings sent direct to their phone, text message or e-mail from the Environment Agency.
- City of York Council has adopted a sandbag policy for times of flooding. In accordance with the Environment Agency flood warnings, the Council will sand bag at risk buildings subject to available resources and labour.
- In times of emergency the Council also has an emergency plan which, after a major incident, looks at issues such as road diversions, equipment needed to tackle the incident and issues to minimise the effects of the incident.

What York needs to do to work towards a prepared sustainable York in the future:

Continue to investigate the likely future impacts of climate change for York and produce detailed action plans that will better prepare and protect York in the future.



A full list of planned actions to achieve this are detailed in the Climate Change Action Plan 2010.-2011

6. Other greenhouse gas emissions

The focus of this framework centres on reducing CO₂ emissions and methane emissions (through sustainable waste management), however, in the city other greenhouse gases such as Ozone and Nitrogen Oxides (NO₂) are also considered and addressed through Air Quality Management Areas (AQMA), the Local Transport Plan 2 and the emerging Local Development Framework.

In January 200,2 City of York Council declared an Air Quality Management Area (AQMA) based on predicted exceedances of the annual average nitrogen dioxide objective in five areas of the city. The declaration of the AQMA placed a legal duty on the council to improve air quality in the city and to demonstrate that it is actively pursuing the 40ug/m3 annual objective. In order to demonstrate a commitment to improving air quality the council prepares Air Quality Action Plans (AQAP). The council's current AQAP identifies measures the council intends to take to improve air quality in the city.

City of York Council has already achieved a lot in terms of modal shift to walking, cycling and public transport, but the levels of NO_2 are still deteriorating. Whilst City of York Council can strive to achieve more in these areas, only a step change in transport policy is likely to deliver any measurable and sustainable improvement.

This Climate Change Framework and Action Plan for York, will sit alongside a newly emerging Low Emission Strategy. This emerging low emission strategy will control toxic gases from fuel use in buildings and vehicles. Figure 4 illustrated the remit the Low Emission Strategy.

Low emissions, sustainable York What the city is currently doing

- City of York Council is currently considering the impact of a number of low emission measures across the city and is developing a Low Emission Strategy for York.
- City of York Council created a 'carwise' publication in December 2008, which promotes alternative fuelled vehicles as well as walking, cycling and more efficient use of vehicles. Discounts for low emission and small vehicles were introduced on parking permits in 2006. For example if you drive a low emission car you pay less to park it outside you house.
- A citywide car club was implemented in 2006 and significantly expanded in 2008 to 11 locations across the city. Further expansion of the car club is made possible through contributions from developers based on the number of trips generated by the proposed development. The Council is a member of the car club and uses the vehicles as part of the pool of vehicles available to staff. Staff are also offered a 25% discount on



membership of the club as part of the Council's travel plan and voluntary benefits package.

- The Council has a car-share scheme, which it promotes, to staff through the staff benefits scheme and other 'Carwise' based promotions and publications.
- The Designer Outlet Park&Ride has been relocated to facilitate provision of a ticket kiosk which was constructed in early 2009. The facility to purchase season tickets encourages greater use of the bus and reduces dwell time at stops, as fewer transactions are made on the vehicle.
- Askham Bar P&R site relocation is, along with the development of the new sites on the A59 and Wigginton Road (packaged together as Access York phase 1), being progressed.
- Bus lanes are being progressed on the A19 and Wigginton Road as part of the Fulford Road scheme and Access York phase 1. Implementation on the scheme on Fulford Road began this year and is set to continue into 2011. The scheme will deliver new cycle facilities as well bus priority along the route. Bus priority on Wigginton Road will be delivered as part of the Access York project. As the Wigginton Road site is programmed to be delivered after Askham Bar and the A59 it is likely that bus priority will be in place in 2011.
- The development of an orbital bus route is currently under consideration with feasibility work being undertaken on possible routes, potential patronage and infrastructure requirements.
- Encouragement to use public transport has been developed through the provision of better facilities in the city centre and information at city space kiosks.
- The city's Bus Location and Information Sub-System (BLISS) has been expanded through the equipping of all First vehicles (as of end Feb 2009) with on-board equipment to provide more reliable coverage of real time information. This will allow the launch of 'Your Next Bus' to take place, again encouraging greater confidence in using public transport.
- City of York Council is investigating the development of a lorry routing strategy and the creation of a transhipment centre has been included in the York Northwest Issues & Options report and forms part of the strategic development of the city through the LDF process
- City of York Council is working with the bus operators to refine stopping arrangements and therefore reduce engine idling in the city centre
- City of York Council is requiring all new P&R vehicles (32 no.) to be EURO EEV and by 2011 will be requiring all buses to be EURO III as a minimum, thus reducing emissions across the city.

What the city needs to do in the future:

Develop and implement a Low Emission Strategy for York that compliments the Climate Change Framework and Action Plan and leads to a quantifiable reduction in pollutants across York

A full list of planned actions to achieve this will be detailed in the Low Emission Strategy. A summary of some of the likely actions is provided in the



Climate Change Action Plan 2010-2013.(at the time of print this strategy was still be developed)

7. Implementation

This five year framework and its targets will begin to be delivered through the Climate Change Action Plan for York 2010 – 2013. These plans will be delivered by the Climate Change Subgroup of the Environment Partnership Board and other organisations across York.

The Environment Partnership are ultimately responsible for the delivery of the Framework and Action Plan. As these documents are of strategic importance to the City, their development and implementation is also governed by the Without Walls Partnership Board and also through the City of York Council's Executive. Figure 5 illustrates the governance structure in place to ensure delivery.

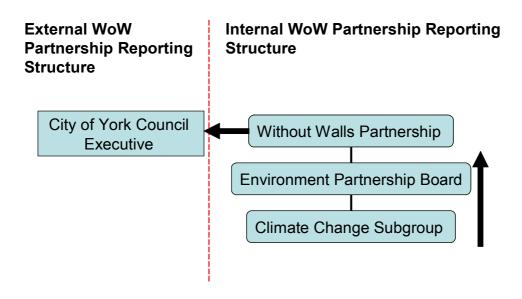


Figure 5 Internal and external reporting and governance arrangements

8.Timecales

Initially, this framework will be reviewed every 5 year. The accompanying Climate Change Action Plan will be reviewed every 3 years. Monitoring of the Action Plan will occur annually, and every two years and a progress report will be publicly available from the Without Walls Partnership website.

9.Conclusion

It is everyone responsibility to take action to combat climate change. Residents and businesses can play a vital role in tackling climate change here in York. This Framework will help coordinate city wide action and ensure York reaches its 80% reduction in CO₂ emissions by 2050.



By publishing this Climate Change Framework, the Without Walls Partnership and City of York Council aim to set the standard for future action to alleviate the effects of climate change, to raise awareness among local people about the likely impacts of a changing climate, and declare York's intention to work in partnership with the residents and businesses to develop a more sustainable York.

The accompanying Climate Change Action Plan (2010-2013) provides details of all the planned actions that will be implemented across the city in the next 3 years and beyond. It also contains practical actions for residents and businesses to carry out today.

A leaflet on creating a Sustainable York and tackling climate change is also available from most City of York Council reception desks and via the City of York

Council's website

www.york.gov.uk/environment/sustainability/climatechange/

Contact us

For more information on tackling climate change in York contact the City of York Council Sustainability Section on:

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City Strategy

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