'City-wide Climate Change' Strategy

Contents

Foreword

- 1. The Issues
- 2. A City Response
- 3. Strategic Priority Themes:
 - a thriving sustainable economy
 - a secure local and renewable energy supply
 - being prepared for a changing environment
 - smarter travel options
 - energy efficient homes
 - informed environmental community

Foreword

A vision for Derby 2050:

This document sets out Derby's ambitions to embrace the challenges that climate change will bring in a positive and proactive way. It acknowledges the magnitude of the issue on the planet and theimpacts this will have across the world. However, the main aim of the document is address this global issue at a local level in a way which will benefit people, the economy and environment in Derby.

The strategy will be an evolving document that provides a framework through which partners across the city can work together to reduce the city's carbon emissions, address the challenges, and take advantage of the opportunities that a changing climate will bring.

The aims of the strategy are to:

- 1. raise the profile and understanding of how Derby can proactively and positively respond to climate change
- 2. articulate and develop a common agenda for collaboration and partnership working
- 3. acknowledge and build on he strengths of the city
- 4. identify and understand the gaps that exist
- 5. promote long term, integrated planning across different disciplines and organisations to better manage the response to climate change.

The strategy identifies a number of strategic priorities (the 'themes') for Derby in relation to climate change. The themes are defined below and discussed in the following document:

Derby will be a city that benefits from:

a thriving sustainable economy	Businesses are able to take advantage of and access new technologies, low-carbon goods and services and use resources more efficiently
a secure local and renewable energy supply	The city has reduced its reliance on energy from fossil fuels by developing a locally generated heat and power network and increasing access to a diverse, efficient and more secure energy supply.
being prepared for a changing environment	The city is able to respond positively to the effects of climate change and resource availability.
smarter travel options	Residents and businesses choose to use a range of well provided for, easily accessible and integrated lower carbon travel choices.
energy efficient homes	Residents have homes that enable them to manage their need for, and use of energy, effectively and efficiently.

an informed environmental community	Residents and businesses have access to skills and learning opportunities that lead to positive action, collaboration and changes in behaviour.
-------------------------------------	--

Section 1: The Issue

Internationally climate change has been recognised as the greatest long-term environmental threat with far reaching impacts upon our lives, our health and well-being, the economy and natural environment.

The climate has and will continue to change naturally however, the overwhelming scientific consensus is that our climate is changing rapidly primarily as a result of human activity. According to the United Nations scientific body the Intergovernmental Panel on Climate Change (IPCC)¹, the leading international body for the assessment of climate change, warming of the climate system is unequivocal. This is evident from observations of increases in global average air and ocean temperatures, widespread melting of snow and ice and rising global average sea levels.

There is now almost 40% more carbon dioxide, the main greenhouse gas, in the atmosphere than there was before the industrial revolution, a level not experienced for at least the last 800,000 years. Consequently, the global average temperature continues to rise, and 2000–09 was the warmest decade on record since at least the 1850s.

Climate Change Facts:

- The Earth's surface has warmed by about 0.8°C since around 1900 and by around 0.5°C since the 1970s.
- The average rate of global warming over the period from 1901 to 2010 was about 0.07 °C per decade.
- More than 30 billion tonnes of CO₂ are emitted globally each year by burning fossil fuels.
- Average global temperatures may rise between 1.1°C and 6.4°C above 1990 levels by the end of this century.

(Source: Department of Energy and Climate Change)

Even with strong action now and in the future to reduce greenhouse gas emissions, past and present emissions mean that climate change is inevitable and in 2008 the UK government's Committee on Climate Change declared that *"it is not now possible to ensure with high likelihood that a temperature rise of more than 2°C is avoided."*The 2°C Celsius target has been internationally recognised as the limit in average temperature rise required to avert the worst possible consequences of climate change.

¹<u>www.ipcc.ch</u>

Climate Change Impacts

Climate change will have a range of impacts globally, nationally and locally from increased risks of flooding and drought to increases in summer temperatures.

In the next ten to twenty years, in Derby we are likely to experience more extremes in weather; high winds; intense periods of rainfall; storms; increased very cold events in the winter, higher summer day and night-time temperatures; alongside an overall trend of warming temperatures.

These changes will impact upon us locally; not just on our environment but also on the way we live and our social and economic wellbeing:

• Extreme weather such as flooding: causing traffic disruption and damage to homes, businesses and infrastructure; all of which lead to increased costs and affect long term well being

• Water supply: changing rainfall patterns leading to unpredictable rainfall and water shortages. Water shortages may impact upon food production.

• Food production: the supply and price of food will be affected due to impacts upon crop growth which results in poor harvests. Increases in food prices will impact upon people's availability to afford staple foods which can have health implications.

• Health: increased risk to health through extreme heatwaves, floods, storms, fires and droughts. This will impact on health and put pressure on healthcare services.

Source: Climate East Midlands

The city will also be affected by the wider global impacts of climate change and the pressure of resource scarcity.Businesses and people in Derby depend on materials, goods, and energywhich originate from around the world. Climate change will impact upon these areas, threatening significant interruptions to supply chains or causing price rises unless the vulnerability is recognised now, and acted upon.

Section 2: The City Response

The UK is committed under the Climate Change Act to an 80% emissions reduction in 2050 on 1990 levels, and has set in place carbon budgets which commit the UK to a 17% emissions cut by 2020 on 2010 levels (34% emissions cut on 1990 levels) and a 50% cut by 2025.

Meeting this extremely challenging target cannot be achieved bynational Government on its own and itrequires the active support of every community, business and individual throughout the country. Derby needs to play its part at a local level by reducing the city's carbon emissions and preparing for a changing climate.

City-wide emissions

Government figures have shown that in Derby from 2005 to 2010 the total carbon emissions have fallen by 8%, a fall of 140kt of carbon dioxide to a city level of 1604kt CO₂. The fall is across all the three sectors which are defined as commercial and industrial $(45\%)^2$, domestic(32%) and transport (23%).Overall per capita emissions for the city have decreased from 7.4 ktCO₂ in 2005 to 6.5 ktCO₂ in 2010.

Despite a modest decrease in emissions, modelling (through Vantage Point) suggests that Derby will not achieve the carbon emissions reduction target of an 18% reduction on 2008 levels by 2020 without intervention above the level which will be implemented by the Government low carbon transition plan³ (LCTP). The Vantage Point modelling looks at measures and technologies that the Government is seeking to introduce through the LCTP across three sectors (transport, domestic and commercial and industrial) and applies a level of take up of these measures to Derby to assess the impact on the city carbon emissions.

The modelling predicts that if all the measures within the LCTP are implemented in Derby to the maximum capacity, the city will fall short of the reduction target by approximately 164 ktpa CO₂ (24%). This demonstrates the need for the city to address carbon emissions across all three sectors and to implement additional local measures.

A city-wide strategy

The City Council established a Climate Change Strategy in 2010 and the city has already acknowledged the need for action on carbon emissions through commitments made by the Derby City Partnership in the Derby Plan 2011-2026. The Derby City Partnership members reflect a wide range of interests such as local authority and health careservices, community organisations, the police, learning providers, media, manufacturing, retail,faith and race communities. The Derby Plan has been developed through the Partnership as the long-term plan to improve the quality of life for everyone in Derby both now and for future generations.

The commitments within the Derby Plan are to take action to reduce:

- carbon emissions from business and transport
- household carbon emissions

This is the first city-wide strategy for Derby and builds upon the Derby Plan commitments by identifying six strategic level priority themes to address both climate change mitigation and resilience. The themes are outlined in table 2. Within this document each theme is addressed to building a picture of what the City needs to achieve, where the City is now and a number of key high level steps for moving forward.

² Percentage of emissions at 2010 levels

³ The LCTP 2009 set out a five point plan to tackle climate change and deliver on carbon budgets

Mitigation	Reducing the release of greenhouse gases by using less energy more efficiently and changing to renewable energy sources.
Resilience	 Adaptation: preparing communities and environments for inevitable negative impacts and maximising the positive aspects of climate change, and
	• Resource security: the issue of climate change will combine together with that of resource depletion and competition (food, energy, water, metals, and oil) as well as loss of habitat, species, air-quality, water and carbon sinks.

Taking the Strategy Forward

This document does not prescribe in detail what needs to be done under each of the priority themes but identifies strategic level opportunities that can be addressed through partnership working. This approach has been taken in recognition that no single organisation has the remit, expertise and resources to address climate change on its own.

To acknowledge and enforce the partnership approach the Derby City Partnership Renaissance Board is the sponsoring body for the City's Climate Change Strategy and will oversee the progress that is made through an annual progress report.

The City Council will continue to support the Climate Change Alliance, a partnership of key organisations within the City with interest in the climate change agenda. Members of theClimate Change Alliance will need to have ownership of and endorse the Strategy.

Through the Alliance and with wider stakeholders the aim will be for partners to work together to identify and agree project opportunities under each of the themes that will help deliver the City-wide vision.

Table 2: The Themes description

1. A thriving sustainable economy	2. A secure local and renewable energy supply
Developing a low-carbon economy is a way of taking advantage of, and progressing, the need to reduce carbon emissions and reliance on increasingly expensive energy sources. It is a sector predicted to grow and it is vital Derby can benefit from this. Locally it focusses on enabling businesses to take advantage of traditional environmental goods and services and using resources efficiently but also creating new opportunities through innovation and technologies.	Creating a decentralised energy is a move away from reliance on centralised energy systems such as power station generated gas and electricity. Decentralised and low carbon energy looks at local district heating systems and using alternative fuel sources as well as effective use of current resources such as energy from biomass and waste.
3. Being prepared for a changing environment	4. Smart transport
Climate change adaptation is a crucial part of safeguarding and improving the area's economy, society and environment. The city needs to have long term planning to adapt, and be prepared for changes in weather and climate now. By being prepared it will reduce the vulnerability of the city and the organisations and individuals within it to negative impacts. At the same time the city needs to recognise and capture any benefits from climate change.	The use of transport has a significant impact on carbon emissions. Within Derby, nearly a quarter of the city greenhouse gas emissions are from transport, making carbon reduction from this sector a priority. Smart transport looks at environmentally sustainable options that are accessible and easy for residents and businesses in order to encourage changes in behaviour.
5. Energy efficient homes	6. An informed environmental community
Residents contribute to carbon emissions with domestic emissions accounting for 32% of city wide emissions in 2010. Residents will be affected by changes in the climate due to increased heat and cold weather events as well as resource scarcity impacting upon energy supply andpeople's ability to pay for heat and power.	Access to information, skills development and the communication of climate change in a way that engages residents and businesses across the city is vital in creating changes in behaviour.

Section 3: The Themes

A thriving sustainable economy

Businesses are able to take advantage of technology, goods and services which enable them to use resources more efficiently while creating growth through innovation in low carbon markets

Derby will be a city where

Businesses have taken advantage of the opportunity created by the low carbon economy and built on its strengths to generate growth, new jobs and investment in the city. Businesses in traditional areas of manufacturing, industry and design have adapted to operate efficiently and the area has benefitted from innovation and creativity to develop new technology and techniques.

By adopting this approach the city is realising lower costs, retaining more money in the local economy, and reducing resource use and waste. There is less dependency on energy and resources and the local economy is more resilient to change.

The present

Within Derby there is recognition of the importance of the low carbon economy in generating jobs and a sustainable economy that generates environmental benefits. Through the Economic Strategy there is a commitment to pursue a low carbon economy in Derby and to realising the environmental and economic opportunities associated with reducing energy usage. These low-carbon ambitions underpin each one of the indicators within the Economic Strategy.

Derby is well positioned to take advantage of the opportunities due to the technical capacity in the area and in 2010 Derby in the top 5 cities for Low Carbon Environmental Goods and Services(LCEGS) sector employment⁴.

There have already been developments within Derby and there are examples of 'blue-chip' companies taking advantage of the low-carbon market opportunities for example Bombardier has recent contracts for electric and hybrid trains and Rolls-Royce is working in partnership to deliver reactors for new nuclear power stations. There are also emerging support and collaboration forums that are focussed on, or related to low-carbon economy themes. These are also supported by a number of Council programmes which are supporting innovation (Enterprise Growth Fund), resource efficiency (Bespoke) and sustainable transport (Connected).

Derby also has skills and knowledge development opportunities through the Derby University which has well-established climate change and environmental managementrelated courses and degrees, while Derby College is part of the National Skills Academy for Environmental Technologies (NSAET).

To fully take advantage of this sector and to help Derby realise opportunities in terms of emerging technologies and 'green jobs, collaborative work is on-going across Nottinghamshire and Derbyshire. Research by the University of Derby in partnership with Derby and Derbyshire Councils, isseeking to identify the potential to enhance low carbon innovation and increase in knowledge transfer between the universities and business to boost growth and productivity.

Moving Forward

⁴ Centre for Cities publication

For Derby to take advantage of the low carbon economy there is a need to bridge the gap between the technical capacity, the knowledge that the area can benefit and practical action to ensure change.

Key steps:

- Establish an understanding of how different businesses in Derby can relate to and take advantage of the supply chain of a low-carbon economy
- Development of the Global Technology Cluster and InnovationCampus to promote business growth, development and innovation.
- Identifying necessary infrastructural changes and investment, such as broadband and communications networks.
- Actively support small and medium sized businesses to access support in the form of guidance and resources to improve resource efficiency.
- Support and develop low-carbon skills, education, training and employment opportunities
- Establish a partnership across the city to promote the low carbon economy linking skills providers, developing peer to peer learning and innovation.

Page 10 of 20

A secure local & renewable energy supply

The city has reduced its reliance on energy from fossil fuels by developing a locally generated heat and power network and increasing access to a diverse, efficient and more secure energy supply.

Derby will be a city where local energy supply networks are established, utilising low carbon fuels such as. In addition to this there will be a mix of renewable energy installations which will aim toprotect our economy and residents from energy shortfalls whilst significantly decarbonising our electricity supply.

Derby will have an integrated energy plan which:

- supports the establishment of smarter local energy networks
- promotes small and large scale renewable energy across homes and businesses
- works to protect residents from rising fuel prices
- reduces the city's reliance on fossil fuels

Derby will develop a district heating network that will seek to incorporate public and private sector housing as well as new housing developments, businessesincluding entertainment venues such as Pride Park stadium and the leisure complexand the city centre area. The network will aim to expand to link up areas across the city, enabling private homes and businessesto benefit from more stable energy costs, and low carbon technology.

There will be integration into planningpolicy which will promote local energy networks across the city, working with developersto connect to combined heat and power systems and to developrenewable energy installations.

The city will promote the development of a network of diverse heat and power sources including combined heat and power, renewable energy such as wind, solar, biomassand energy through anaerobic digestion and gas.

The present

The vision of a low carbon city, running on a district heating network is a complex and long term plan that will take a number of years to initiate and subsequent decades to develop.

Derby is at the very start of the process of assessing if a district heating network can be established with research being undertaken to assess the suitability a number of key sites across the city. The result of this study will have long term implications for Derby and will need to be integrated within the future plans and policies for development in the city and as part of our long term adaptation and low carbon economy goals.

Renewable energy sources are being established across private homes, social housing and commercial premises in the city and this has been supported by the Government feed-in-tariff encouraging take up by businesses and homeowners. The Local Plan⁵supports planning permission for beneficial renewable energy and encourages developers to have full regard for conserving energy and generating energy from renewable sources.

Moving Forward

⁵<u>http://www.derby.gov.uk/media/derbycitycouncil/contentassets/documents/policiesandguidance/planning/9</u> %202006%20Environment%20.pdf

For Derby to develop a secure, diverse and affordable energy supply work will be carried out to develop a coordinated approach which ensures:

- Greater co-operation with businesses and organisations within Derby to identify and exploit opportunities to develop local energy and renewable within the city.
- Better understanding of the capacity for local and renewable energy and how to engage both the domestic and commercial sectors

Key steps:

- To use the results of the district energy feasibility study to inform a city-wide strategy which will become an integral part of future developments within the city.
- Ensure that decision makers across the city work to establish developments in the city that utilise and support renewable and local energy supply.
- To integrate into planning and regeneration policy consideration of renewable and decentralised energy.
- Identify large scale opportunities for future projects to increase levels of renewable technology such as additional hydroelectric plants, wind turbines

Page **12** of **20**

DRAFT – APRIL 2013

Being prepared for a changing environment

The city is able to anticipate, measure and act positively and proactively to the effects of climate change and resource availability.

Derby will be a city where businesses, residents and organisations are ready for the changes in our climate and the extreme weather events they are likely to bring. Across the city people understandthe relationship between how we work and live is shaped by our climate and environment and vice versa. Derby will be prepared for a changing climate and plans are in place to enable the cityto cope with, respond to and take advantage of climate change.

The city will build on its understanding of the vulnerabilities in the city and of what weatherevents and trends we are likely to experience. This is used to predict changes and impacts and allow us to adapt to the future changes through better planning, design and education. There is a collaborative approach to responding to the inevitable impacts which recognises the interactions between different policies, implements long term planning and enables a more dynamic approach to respond to extreme weather events.

The city will implement and share best practice business continuity plans across services and businesses that allow organisations to cope with extreme events and continue to provide services. The use of heatwave plans, smarter technologies and systems and sharing of information will monitor and protect residents from the impacts of increasing temperatures and other climatic impacts.

New developmentand regeneration within the city is planned to ensure buildings and infrastructure incorporates adaption and mitigation measures to manage risks such as sustainable drainage systems, efficient water usage and retention, green infrastructure and effective use of insulation and ventilation.Defences are in place to protect the city centre infrastructure from river flooding. Where possible plants and vegetation will be suitable for the .climate. The council will work with partners in emergency services and public health to identity and address local health and mobility risks from a changing climate

The present

Work with regional and national partners is being carried out to understand better how well the city is adapting to climate change and gauge the level of resilience to current and future climate and weather scenarios.

Derby City Council formally began work on climate change adaptation in 2008 using the framework of National Indicator 188 (NI 188) - Planning to Adapt to Climate Change, to manage progress and has an adaptation action plan for its services. The action plan addresses key risks highlighted in the climate change risk assessments which were undertaken on Council services.

Flooding in the city has been recognised as a major impact and the Environment Agency and partners are have produced a masterplan for the River Derwent 'Our City, Our River'(<u>a case-study</u>).

Moving Forward

Work is being done across the city by different organisations to adapt on an individual level however at a city level there needs to be a more holistic approach, greater knowledge about the impacts at a local level on services, organisations and neighbourhoods, sharing of that information and joint working on strategic decision making and developments.

Key steps:

- Build links to the city partnership to improve understanding of and collaborative action on climate change adaptation. To include the creation of a high-level policy and guidance, using local climate projections and Planning For Change and DEFRA advice on spending and procurement, to ensure adaptation is considered in decision making.
- Establish systems to develop and share knowledge about the impacts at a local level on services, organisations and neighbourhoods addition to promotion and sharing of information on practical adaptation initiatives both for residents and businesses such as living roofs and walls, permeable pavement surfaces and rain water harvesting.
- Recognise the significant cross-cutting value of many adaptation measures and implement and embed them in other areas of work and projects. For example green space management offers significant well-being, aesthetic, biodiversity value, but if designed and situated correctly, also offers urban cooling, flood management and air quality value too.
- Create 'live' domestic and commercial adaptation research projects with assistance from students and staff at Derby University and Derby College leading to greater levels of resources, knowledge transfer and cost-savings for local economy.

Smart travel options

Residents and businesses choose to use a range of well provided for, easily accessible and integrated lower carbon travel choices.

Derby will be a city where:

- Land use planning enables people to live, work and access facilities and each other via public transport, walking or cycling.
- people have access to an efficient and effective public transport system that they choose to use
- people are able and willing to walk and cycle safely between their homes and places of work and facilities through a comprehensive cycle and walking network
- there is a lower proportion of single car occupancy with increased car sharing and pool car initiatives
- the availability of alternative sources of fuel is increasing and is being made more accessible (for example charging points in appropriate sites)

Where are we now?

The use of transport has a significant impact on carbon emissions with nearly a quarter of all Derby's greenhouse gas emissions resulting from transport. Although from 2005 to 2009 per capita emissions from transport fell from 1.7 tonnes to 1.5 tonnesthis remains higher than the larger neighbouring cities of Nottingham and Leicester.

Derby is a compact city and is generally well provided for in terms of sustainable travel choices to meet current demand. This includes:

- being a relatively compact city conducive to many journeys being undertaken on foot and by bike
- having a comprehensive hub and spoke bus network with current bus operators committed to improving services within Derby
- enjoying accessible rail services with good public transport interchange

This is supported by a robust approach to planning the future of the city in terms of land use and transport planning. This is reflected emerging Core Strategy, which underpins Derby's plans for economic development and housing growth 2028, and a 15 year transport strategy in the Local Transport Plan (LTP). Within these plans, coordinated transport and land use planning aims to reduce travel requirements and facilitate behaviour change.

The city has been successful in accessing funding including the Local Sustainable Transport Fund (LSTF), Better By Bus DfT award and Plugged in Places. These funding streams are supporting the testing and evaluation of a range of sustainable transport projects and will be used to demonstrate the impact of combining small scale infrastructure provision with complementary behavioural change activities.

The biggest and mostambitious project is the LSTF which seeks to encourage low carbon economic growth by increasing walking, cycling and public transport use. The £4.922 million programme delivered under 'Connected', has five integrated programme strands:

- improve sustainable transport options for commuters and businesses
- encourage behaviour change through a smarter choices package
- enable job-seekers to access employment at targeted sites
- work with employers to support sustainable travel
- ensure new developments build in sustainable travel options from the start.

Moving Forward

To address the impact of transport we need to tackle issues around infrastructure and planning to make sustainable transport choices attractive, integrated and accessible.

This means developing knowledge and understanding of future travel behaviour and demand and supporting sustainable transport infrastructure and culture.

Key steps

- Continue to deliver and expand a range of high quality sustainable transport options for commuters and businesses
- Encourage behaviour change through a variety of smarter choices initiatives
- Work with employers to support sustainable travel
- Ensure new developments build in sustainable travel options from the start
- Support the Sustainable Transport Partnership indeveloping a wider, active ownership of the sustainable transport agenda in the city
- Invest in sustainable transport infrastructure and initiatives, collaborating with partners
- Invest in sustainable transport infrastructure and work with partners to deliver projects that support the culture of sustainable travel and deliver long term low carbon and economic benefits to Derby.

Energy Efficient Homes

Residents have homes that enable them to manage their need for, and use of, energy effectively and efficiently.

Derby will be a city where there are established programmes, delivered at the local level, to assist residents particularly those in properties that are hard to treat and at risk of fuel poverty. Programmes are in place to support residents to live in low carbon homes and help to residents to make energy efficiency improvements and energy reduction choices.

Carbon emissions from homes have been reduced through:

- greater awareness of the benefits of living in a warm, energy efficient home
- improvements to efficiencies across the housing stock, new and old, private and public
- wide scale implementation of energy efficiency measures such as cavity wall, loft insulation, and internal and external wall insulation,
- wide scale implementation of small scale generation of renewable energy such as solar panels, small wind turbines, ground source heating, replaced boilers.

The present

The energy efficiency rating of the housing stock across all tenures in Derby in 2010 was estimated to be 59, which was slightly higher than the national average SAP rating of 55. The rating of social housing stock, managed by Derby Homes Ltd, at 72 was higher than the national average. As with the national picture, the private rented sector was the least efficient tenure.

Significant efforts have been made in Derby to improve the energy efficiency of homes both within the private and public sector. Over the past 15 years significant home energy improvements have been made through Government schemes such as the Decent Homes Standard, the Warm Front Scheme, the fuel suppliers' Energy Efficiency Commitment, as well as local initiatives. Within the city the national Carbon Emission Reduction Target scheme has been promoted and since March 2010 the Council has worked in partnership with Dyson Insulations and Apex Carbon Solutions to install loft insulation to over 1,200 homes and cavity wall insulation to over 650 homes.

A lot of improvements have also been made in recent years through the national Community Energy Saving Programme scheme, part funded by Eon. This scheme benefited both social housing and private sector housing. The work on the social housing stock included:

- 622 solid wall insulation installations (458 internal and 164 external)
- 1,390 new central heating installations
- 1,544 loft insulation installations
- 265 had solar PV.

This work has also resulted in over 200 private households getting external wall insulation, with over 80 having new boilers as well.

Moving forward

Despite positive action and initiatives taking place in Derby, there is a need to continue to support hard to treat homes and the fuel poor while at the same engaging with neighbourhoods particularly to encourage those able to, to invest in home energy improvements including renewable energy.

Key steps

- Future funding for improvements is changing and the impact of national schemes is unknown so there is a need to ensure that the city residents benefits from the available schemes while providing local level support.
- Continue raising awareness and creating action at a local level about energy efficiency and the benefits of installing renewable energy by providing information, advice, education and developing a network of Neighbourhood Energy Champions (NECs) across the city
- Develop measures to implement home energy efficiency improvements using an area based/street-by-street approach
- Development of partnerships to provide joined up work on home energy efficiency and benefit from central government policy developments.

An informed environmental community

Residents and businesses have access to skills and learning opportunities that lead to positive action, collaboration and changes in behaviour.

Derby will be a city where communication, education and awareness programmes are in place to:

- create or change action making low carbon activities part of the 'every day', empowering and inspiring people to take action, addressing the value-behaviour gap (regardless of whether people care) and creating the public political engagement to push for change in Government and business.
- support the development of skills and knowledge to continually develop and take advantage of new technologies
- supports community, corporate and educational establishments to interact, share information and resources
- enable public opinion to play an important role in influencing political and corporate responses to climate change.

The present

Nationally there is understanding about climate change and the need to take action; Government bodies, corporate organisations and third sector groups have all acknowledged the need to act on climate change. However it is recognised that the attitude-behaviour gap is still relatively high; people and organisations are concerned but continue to act in a way that will contribute to climate change or to environmental harm. This highlights the need to target messages in a way that tackles the attitude-behaviour gap.

Within Derby there are a number of existing bodies which promote, educate and engage the public on climate change as well as business organisations that are investing within the low carbon economy. This includes educational establishments such as Derby College and the University of Derby with well established courses and expertise, voluntary organisations with direct and indirect roles such as Transition Derby and business groups.

Within schools environmental education is addressed through the core sciences although climate change is not mandatory, and 65 schools within Derby are working within the Eco Schools award programme which aims to promote environmental awareness and action.

An event in 2010 brought together many of the groups with an interest in climate change in Derby, this highlighted a variety of groups working across the area with different interests but impact upon climate change; transport, food, waste.

Key messages from the workshop included:

- the need to 'educate others and spread the word'
- Working 'together' to educate and share information
- Developing further opportunities to learn, debate and network

Moving forward

Key steps

• Development of core messages focussed on different audiences (and which address the principles of influencing individual behaviours⁶)that can be used to help engage and inspire different groups and individuals.

⁶<u>http://talkingclimate.org</u> – UK based partnership which brings together research on climate change communication

- A city wide action plan for communicating climate change and supporting practical initiatives
- Improve coordination of climate change networks and interest groups. A network that promotes and brings together organisations working on environmental/climate change action, both community and corporate.
- Encourage the take up of the Eco Schools programme and practices education to inspire young people.
- Build on existing educational strengths and promote knowledge transfer through placements and research.

Page **20** of **20**