# DRAFT CLIMATE CHANGE STRATEGY

May 2008

#### HOW DOES THE CLIMATE STRATEGY LINK WITH THE COUNCIL'S KEY PRIORITIES AND STRATEGIC OBJECTIVES

PROSPERITY	PEOPLE		PLACE		PERFORMANCE	
STRATEGIC OBJECTIVE 1	STRATEGIC OBJECTIVE 2	STRATEGIC OBJECTIVE 3	STRATEGIC OBJECTIVE 4	STRATEGIC OBJECTIVE 5	STRATEGIC OBJECTIVE 6	
PUT CHORLEY AT THE HEART OF REGIONAL ECONOMIC DEVELOPMENT IN THE CENTRAL LANCASHIRE SUB- REGION	IMPROVING EQUALITY OF OPPORTUNITY AND LIFE CHANCES	INVOLVING PEOPLE IN THEIR COMMUNITIES	DEVELOP LOCAL SOLUTIONS TO CLIMATE CHANGE	DEVELOP THE CHARACTER AND FEEL OF CHORLEY AS A GOOD PLACE TO LIVE	ENSURE CHORLEY BOROUGH COUNCIL IS A PERFORMING ORGANISATION	
$\rightarrow$	∻	∻	+	$\diamond$	∻	
LONG TERM OUTCOMES						
<ul> <li>1.1 A vibrant local economy</li> <li>1.2 Thriving Chorley town centre</li> <li>1.3 Average earnings in line with county average</li> </ul>	<ul> <li>2.2 Improved life chances for young people and children</li> <li>2.3 Improved quality of life for the borough's older people</li> <li>2.4 Healthier communities and reduced health inequalities</li> <li>2.5 Improved quality of life in rural communities</li> </ul>	<ul> <li>3.1 Improved access to pubic services</li> <li>3.2 People will be involved in decision making and in improving the well being of their communities</li> </ul>	<ul> <li>4.1 The Council's environmental footprint will be reduced</li> <li>4.2 An improved local environment</li> </ul>	5.1 More people will be satisfied with Chorley as a place to live	<ul> <li>6.1 Community aspirations are delivered through the efficient use of resources and effective performance management</li> <li>6.2 An excellent community leader</li> <li>6.3 A provider and procurer of high quality priority services</li> <li>6.4 An excellent Council that is continually striving to improve</li> </ul>	

#### Contribution to key objectives

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	PROSPERITY							
	PUT CHORLEY AT THE HEART OF REGIONAL ECONOMIC DEVELOPMENT IN THE CENTRAL LANCASHIRE SUB-REGION							
•	By ensuring that businesses operating within Chorley are aware of the impacts of climate change, the ways to reduce the impacts and the possibilities of positively using them so that they will be in a strong position to withstand the impacts of climate change; be ready to exploit new markets and make financial savings through efficient business processes.							
•	Future designs of the town centre environment will ensure it is attractive in relation to the climate.							
	PEOPLE							
	IMPROVING EQUALITY OF OPPORTUNITY AND LIFE CHANCES							
•	By ensuring that access to local services and employment opportunities is open to all, in particular those who have little access to the car. Increased walking and cycling disproportionately makes a positive impact on the young and those who do not drive. It impacts on health as it leads to more physical activity. By promoting and encouraging the generation of renewable energy in community schemes, and other development reduces fuel costs and provides independent fuel supply. Again this has a disproportionately positive impact on the poorer and more vulnerable.							
•	Reducing the impacts of extreme weather conditions will affect those in areas of flood risk such as some rural areas.							
	INVOLVING PEOPLE IN THEIR COMMUNITIES							
•	communities. This will result in possible community or Local Area Network energy schemes, reductions in emissions and an understanding of how individuals and communities can make a direct impact on future greenhouse gas emissions, as well as educating the public about possible impacts.							
	PLACE							
	DEVELOP LOCAL SOLUTIONS TO CLIMATE CHANGE							
•	The Climate Change Strategy relates directly to this objective.							
	DEVELOP THE CHARACTER AND FEEL OF CHORLEY AS A GOOD PLACE TO LIVE							
•	The Strategy will ensure that the adverse impacts of Climate Change are planned for and alleviated within the Council's function. An example of which would be parks and open spaces are planted to provide shading in the summers, and areas of ground are sufficiently well drained so as to be accessible in the winter.							
	PERFORMANCE							
	ENSURE CHORLEY BOROUGH COUNCIL IS A PERFORMING ORGANISATION							
•	Work with colleagues to identify and deliver long- term efficiencies through taking into account the long term impacts of climate change on the Council's work and possible financial impacts. By implementing the planned actions in the Climate Change Strategy the Council will provide excellent leadership to the community.							

The Climate Change Strategy directly relates to the requirement to undertake high quality sustainable procurement. The Strategy refers to challenging short, medium and long term targets for the Council which will monitored and revised if required.

# Links with other Key Council Strategies

This strategy the links with other key corporate and directorate strategies particularly:

- o The Sustainable Community Strategy 2005-2025
- The Corporate Strategy
- The e-Government Strategy
- o The Customer Focused Access and Service Design Strategy
- The ICT strategy.

The Climate Change Strategy is an overarching document that should impact on all the Council's activities and services. It is a direct result of Corporate Strategy Objective 4: Develop local solutions to climate change.

# National Context/External Links and drivers

The Climate Change Strategy has been produced in the context of the international imperative to reduce carbon emissions and the requirements of Local Government set out within the Climate Change and Sustainable Energy Act 2006. Local Area Agreements and the Lancashire Climate Change Strategy, as well as a plethora of initiatives, including the Climate Change Bill make it vital for the Council to embed the wider climate change agenda within all its work.

# COUNCIL CLIMATE CHANGE STRATEGY.

#### Foreword

This document has been produced to set out how Chorley Council can, in its day-to-day business, reduce the effects of, and combat, global warming.

It sets out the different aspects of the Council's work, where there are opportunities to reduce carbon emissions. It also sets out how climate change will impact on the area and how the Council's work will be affected.

The following strategy sets out how Chorley Council as an Organisation, Service Provider and Community Leader can grasp the opportunities associated with climate change, adapt to cope with the unavoidable impacts of Climate Change and reduce its carbon footprint in line with national targets.

Cllr Malpas Executive Member for Economic Development and Regeneration has special responsibility for the Council's response to Climate Change and has welcomed this approach.

"I welcome the Council's Climate Change Strategy and would urge everyone in the Council to do their "bit". Whatever role we play in the Council, whether Member or Officer, each decision we make affects the Council's carbon footprint and the world in which we live. Together we can help by making sure that our actions are seen as good practice and that the wider community will look to us to Leadership in dealing with what is considered to be the greatest threat facing Mankind."

Jane Meek Corporate Director (Business) has overarching responsibility for Climate Change within the Borough.

So far we have:

- Set up Climate Change Task Group.
- Produced a Sustainable Procurement Policy. Procurement of all the Council's electricity is sourced from renewable sources. Fleet vehicles are run on bio-diesel, paper is recycled and energy usage is a key determinant of IT procurement.
- Commissioned Liberata to provide a baseline of electricity and gas consumption from Council buildings and to provide a number of actions to considerably reduce use energy usage and make financial savings.
- Prioritised global warming as part of the Local Strategic Partnership within the Community Strategy.
- Publicised significance of Climate Change, sources of grant funding and information on climate change through the Council's website and educational work with partners in primary schools. Free energy saving light bulbs are distributed during the Council's Action Weeks.
- Linked Council funding aimed at community groups for capital works to consideration of climate change.
- Achieved rates for recycling and composting waste over and above statutory targets.
- Increased the amount of grants to vulnerable households to improve the energy efficiency of homes via the local Home Improvement Agency.
- Produced planning document insisting on new developments addressing Climate Change.
- Decided to change Mayoral car to energy efficient model.
- · Offered training on Climate Change and its impacts on Chorley to Members and Chief Officers

Building on this:

- Climate Change is to be embedded in all the Council's activities.
- The Council will continue to provide clear Community Leadership by leading through example in the fight against Climate Change.
- Businesses and residents should be encouraged to address Climate Change.

# Chorley's Commitment to fight Climate Change.

Chorley Council is committed to fight Climate Change.

The new Local Area Agreement for Lancashire will include a serious commitment to tackling climate change. Improvement targets will challenge local authorities and their partners to dramatically reduce their  $CO_2$  emissions over a 3 year period and require communities and organisations to make adaptations for managing climate change. Through the Chorley Partnership, Chorley Council will be instrumental in ensuring that the targets are achieved.

- Strategic Objective 4 of the Corporate Strategy is to, "Develop local solutions to climate change"
- Priority 3 of the Chorley Sustainable Community Strategy is, "Developing local solutions to Climate Change".

The Council's Corporate Directors are responsible for actions that fall within their areas of influence whilst Executive Members are responsible for taking climate change issues into account in all Council decisions including procurement.

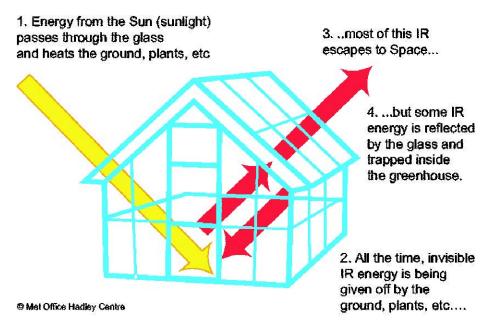
# What is Climate Change?

The climate has always changed with periods of extreme weather. Climate change as commonly referred to relates to changes in trends in the weather attributable to the human race's activities and in particular those of the industrialised nations.

The Intergovernmental Panel on Climate Change report in 2007 unanimously agreed that Climate Change was resulting in increased temperatures. These are attributable to the emission of greenhouse gases. There are a number of gases that contribute to global warming. However, the most common, carbon dioxide, (CO<sub>2</sub>), is the gas that has been targeted in national and international treaties, trading schemes, the Climate Change Bill in the UK, and more locally, the Lancashire Climate Change Strategy.

# The Greenhouse and subsequent global warming:

(IR equates to infra red.)



#### Why do we need to reduce our emissions?

The accepted conclusion amongst scientists is that unless considerable reductions are made in greenhouse gas emissions soon, this could limit how effectively the impacts of climate change can be managed, and whether global warming can be controlled. Significant warming with substantial impact is already unavoidable. It is important to prevent global warming reaching the "tipping point". This is when polar ice caps, and frozen tundra melt, fundamentally changing ocean currents and releasing additional greenhouse gases into the atmosphere that will dangerously accelerate warming.

The Climate Change Bill puts into law targets to reduce carbon dioxide emissions by at least 60% by 2050 and 26-32% by 2020, against a 1990 baseline.

#### Impact globally

Globally, climate change will impact on sea levels, possibly leaving an additional 72 million people at risk from storm surges.

Crops and productivity will alter with those in the most marginal farming areas being the most vulnerable to drought. Crop production will be altered depending on how climate change alters soil and growing conditions in particular regions.

Diseases associated with the tropics, such as malaria could increase by 45-50% if the temperature rises by 3-5 degrees Celsius. Asthma and other respiratory diseases would become more acute and prevalent. The elderly and children would also be more vulnerable to extreme heat.

Ecosystems will be affected. Mountain glaciers will retreat, forest cover decline and desert conditions become more extreme.

#### Local impact

Climate Change in England's North West							
	2011-2040	2041-2070	2071-2100				
Change in average annual temperature	0-1 C	1 to 2 C	1 to 4 C				
Change in maximum summer temperature	0-1 C	1 to 3 C	2 to 6 C				
Change in summer rainfall	5 to 15% decrease	10 to 30% decrease	15 to 30% decrease				
Change in winter rainfall	5 to 10% increase	10 to 20% increase	15 to 30% increase				
Change in winter snowfall	20 to 25% decrease	30 to 60% decrease	40 to 100% decrease				
Change in summer and autumn soil moisture content	0 to 10% decrease	10% to 25% decrease	20 to 40% decrease				
Change in sea level	Not available	7-36 cm increase	7- 67 cm increase				

The table below shows possible climate change scenarios within the North West.

Source: Climate Change and the Visitor Economy\_ Challenges and Opportunities for England's Northwest

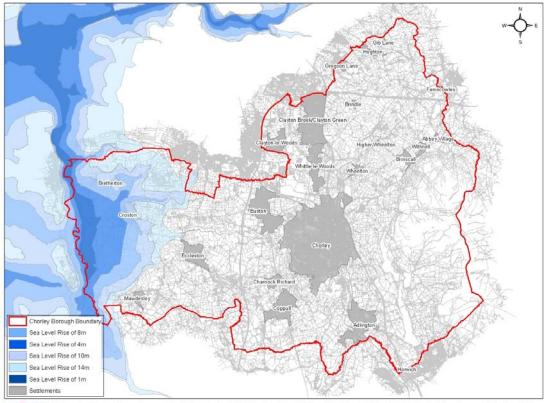
This will have impacts on agriculture; businesses including local councils; householders and the physical environment. For example, the loss of trees in storms and damage to the landscape and buildings as a result of floods.

The recent wet winter weather may be a taste of things to come.



#### Specific impacts on Chorley

There is no specific data relating to Chorley as it is difficult to forecast with any accuracy at a local scale. However, the most extreme scenario undertaken by the Tyndall Centre shows a considerable area of Chorley Borough under the sea within the next 100 years.



Control and Contro

In common with the rest of the North West Chorley will have warmer summers which will affect living and working conditions, with more requirements for shading and cooling.

Declining rainfall in the summer will lead to shortages of water, possible restrictions in water supply, impact on building foundations and on agriculture. It may result in domestic tourism becoming more attractive as the weather in continental Europe becomes unbearably hot, and the summer weather is drier and warmer in the North West.

Increased winter rainfall and lack of cold periods will result in greater risk of flooding, storm damage, added pressure on urban drainage systems, changes to the eco systems, and crops.

A significant reduction in the moisture content of soil in the summer and autumn could lead to ground subsidence.

# In general, Chorley's householders, its business community and the Council itself will have to take on board higher costs attributable to climate change.

Aspects of the Council's work that are likely to be directly affected by climate change are:

• Emergency Planning- For example, increases in one off events requiring use of community buildings for emergency accommodation as the result of flooding.

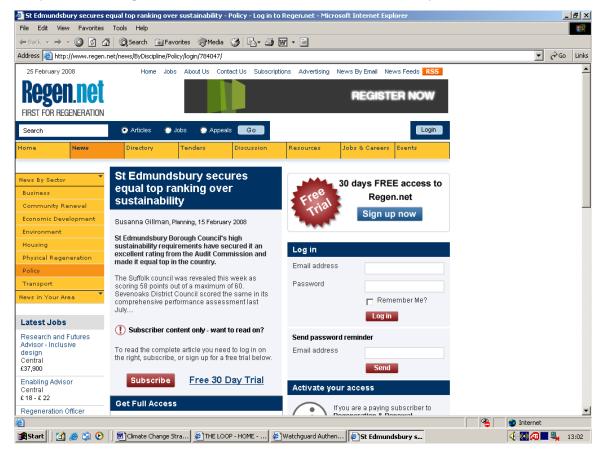
- Spatial Planning- designing in climate mitigation and adaptation matters. Considering shortage of water in summers and excess water in the winter.
- Built environment- Risks of subsidence- will need to ensure that foundations are "future proofed" to deal with extremes of ground moisture levels. Increase in dangerous buildings and trees, through storm, flooding and weakened foundations. Increases in retro- fitting of buildings to deal with extremes of temperatures. Wet weather leading to increases in dampness and adverse living conditions.
- Public Buildings- May require retro fitting to deal with extreme heat, increase effectiveness of water management ie rainfall, surface water, damp issues.
- o Public Car Parks- increased flooding in winter and requirement for shading in the summers.
- Grounds maintenance- increased growing season requiring revised grass mowing patterns. Drought conditions in summer require change in planting. Wetter winters require different winter planting. Planned water management. Parkland- impacts on native trees, ponds and reservoirs.
- Environmental Health- Increases in food poisoning due to warmer conditions. Increases in dust conditions requiring hosing down of areas, increase in flooding with public health impacts.
- Community Safety- Hot summers likely to result in large groups of people being outside in the summer evenings with possible neighbourhood nuisance issues.
- Waste services- Require additional collections of waste to offset public health issue of decaying waste.
- o Business support- Encourage businesses to adapt to new markets.
- o Tourism- Greater opportunity for tourism.

Other incidental impacts will require changes to the Council's activities.

#### What Can the Council do?

The Council has a statutory obligation under the Climate Change and Sustainable Energy Act 2006 to fulfil its responsibilities in relation to energy efficiency, increasing the use of micro generation, reducing carbon emissions and the reduction in the numbers of households in fuel poverty. Councils are required to provide leadership in combating climate change. St Edmundsbury Council recently received the joint highest CPA score of 58 out of 60 having taken a proactive approach to reducing carbon emissions and has embedded sustainability within its work.

Chorley Council is well placed in its three roles as a Service Provider, Community Leader and as an



Organisation to reduce its carbon emissions, and to act as an exemplar of best practice locally for businesses, and the wider community.

It must not only reduce carbon emissions within the Borough, but ensure that by acting strategically the adverse impacts of climate change are planned for and circumvented wherever possible. Planned investment now will make cost savings in the future.

Where there will be positive impacts, such as an increase in domestic tourism in the summer, Chorley will need to be ready to exploit the new market.

Businesses will need to be flexible. For example, put work practices in place to lessen the impact of disruption to the transport infrastructure from flooding in the winter.

Businesses will also have to be positive and see opportunities for creativity, new markets and new methods of operating.

Some impacts of climate change are already unavoidable. They will influence the Council's activities and have cost implications.

New Climate Change performance indicators have been included in the Local Area Agreements. Therefore reductions in emissions and adapting to climate change are central to the Council's role and function. It is also likely in the medium term that the Council may be required to trade in carbon emissions. If this is the case there will be a year on year expectation that carbon emissions will be reduced.

This Climate Change Strategy sets out how the Council should reduce carbon emissions in the short term with long term objectives and also how it should consider the possible impacts of climate change in its service delivery.

#### Where are we now?

The Council is already taking on board some of the climate change messages in some aspects of its work. However, this is undertaken in a piecemeal fashion often as the result of external national indicators and targets, or as a result of specific areas of work such as the Sustainable Resources Development Plan Document (a planning tool).

Many of the efficiency savings that the Council is already working towards will reduce carbon dioxide emissions as an unintended consequence. For example, efficiency savings related to the use of the Council's web site and contact centre reduce the emissions of the Council (heating, stationery, computers etc) and of customers (transport emissions).

Chorley is performing well in some aspects of its service delivery. For example, in planning, the Sustainable Resources Development Plan Document is being finalised and sets stringent standards for new developments, its waste services are one of the Country's top performers and it is committed to promoting energy efficiency savings in the domestic sector.

In common with other local authorities and businesses, carbon emissions have not until recently been considered a factor in the Council's day- to- day activities and service planning.

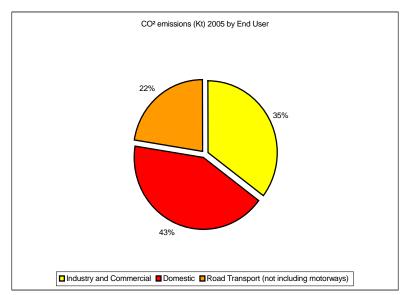
It is important to set out a clear framework so that ALL the Council's activities and employees have the reduction of carbon emissions and adaptation to Climate Change as a key priority.

This Climate Change Strategy will be revised annually. Its initial objective is to meet the 10% reduction in the Council's CO<sub>2</sub> emissions set out in the Corporate Strategy. It will however, set out a framework for embedding climate change into the Council's decision making, Community Leader and Service functions.

It will also complement the Lancashire Climate Change Strategy due to be completed this summer. This has been produced in partnership with the County Council, the Lancashire authorities, the Environment Agency other stakeholders and will include actions to reduce emissions based on detailed research sponsored by the North West Development Agency on which sectors generate the most carbon emissions in the County.

It is important that Chorley's climate change strategy does not duplicate other agencies' strategies as this will lead to confusion and a poor service. It should add value to them.

The following illustrates the baseline figure for carbon dioxide emissions from both the Council and the Borough as a whole.



TOTAL Chorley Borough CO<sup>2</sup> emissions 619 Kt (1000 tonnes).

Figure 1: Chart showing the source of CO<sup>2</sup> emissions in Chorley Borough 2005

This illustrates that the domestic sector in Chorley is the highest emitter of carbon dioxide and Industry and the Commercial sector the second. Roads rank third, but this figure excludes emissions associated with the three motorways running through the Borough.



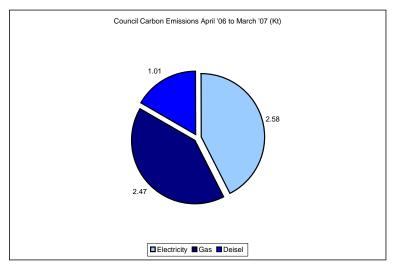


Figure 2: Chart showing the source of  $CO_2$  emissions directly attributable to Chorley Council 2006/07<sup>1</sup>

Chorley Council accounts for approximately 1% of the Borough's total carbon emissions. It is committed to achieving a 10% reduction of Council emission levels by March 2010. This equates to an emissions target of a maximum of 5.45 Kt of CO<sub>2</sub> by 2010.

#### How can we meet the Target?

The target can be met by ensuring that reducing carbon emissions is embedded in all the Council's activities. The immediate target is to reduce  $CO_2$  emissions directly attributable to the Council by 10% to 5.45 Kt by March 2010. This should be seen as a minimum and further long- term reductions planned for with the possibility of becoming a carbon neutral Council in the future.

The Council, in partnership with the Local Strategic Partnership, is committed to reducing within Chorley  $CO_2$  emissions from 6.2 tonnes per head of population in 2005 to 5.89 by 2010, and 5.58 by 2015.

The Local Strategic Partnership will develop with the Council its own complementary Climate Change Strategy.

Appendix 1 sets out a number of existing targets to which the Council is already working which will impact on carbon dioxide emissions.

This Climate Change Strategy has three inter-related areas of opportunity: Chorley Council as an Organisation, a Service Provider and as a Community Leader. Appendices 2-4 set these out in detail.

# Theme One: The Council As An Organisation/ Employer

Chorley Council is responsible for at least 1 per cent of the Borough's emissions and it employs around 380 people.

The Council needs to set its own house in order in relation to carbon emissions and its preparedness for the impacts of Climate Change. The first thing it must do is to understand how much energy and water it uses, the numbers and length of journeys made by both staff and visitors and to consider the sustainability of its procurement process.

Sustainable Procurement is a common factor across all three themes and will play a vital role in supporting the council's Climate Change Strategy. It is defined as a process whereby organisations meet their needs for goods, services, works and utilities in a way that achieves value for money on a whole life basis in terms of generating benefits to society and the economy, whilst minimising damage to the environment.

The Council recognises it has a vital role in furthering sustainable development, through its procurement of buildings, goods, works and services. Procurement decisions have a major socioeconomic and environmental implication, both locally and globally, now and for future generations.

The Council is taking steps to ensure that sustainable procurement principles are becoming embedded in how we conduct our business. Appendix 5 sets out examples of good practice already in place and our Sustainable Procurement Policy and Action Plan shown at Appendix 6 brings together our future plans and actions, particularly around engaging more effectively with our key partners, suppliers and

<sup>&</sup>lt;sup>1</sup> The Council's electricity is from "green" sources however carbon dioxide emissions have been calculated as if it were derived from fossil fuels. This is because there is a limited supply of green electricity and any used by CBC leaves a gap filled by traditional methods of electricity generation. The figure is based on estimates. A detailed baseline is being produced by the Council's partner Liberata.

staff to ensure that sustainable procurement principles and good practice make a real difference to the community we serve.

Our Climate Change Action Plans (Appendix 4) clearly demonstrate the Council's commitment and determination to ensure that the targets set nationally are achieved. These will be revised and monitored annually. Much of the Climate Change agenda is to ensure that everyone is aware of how they can make a positive contribution to reducing emissions and lessening the impacts of global warming. Large impacts can be made by relatively minor adjustments such as ensuring computers and printers are switched off at night, or by ensuring that climate change considerations are written into future contracts. A separate Energy Management Plan is being pursued, which the Carbon Trust estimates would result in 20% carbon emission savings by 2020.

Training and communication are vital to ensure that Staff understand how their actions impact on climate change; how the unavoidable impacts will affect Chorley and the work of the Council; and to deal with these impacts in as cost efficient and effective way as possible.

# Theme Two: The Council As A Service Provider

Climate Change challenges how the Council will provide its services in the future. All the Council's strategies, projects and policies will need to take into account its future impacts and costs. Appendix 4 sets out in detail the actions planned.

How the Council interacts with its service users can influence carbon emissions, for example an interaction via the website not only results in financial savings but also cuts incidental carbon emissions.

The Council's statutory planning function, and its role as a provider of parks, open spaces and public car parking directly influences the Borough's built and natural environment, including the ability to promote energy efficiency, low carbon generation and providing an environment that will be able to withstand and exploit (if possible) the forecast long term changes.

The Council has a direct role in increasing energy efficiency of the existing housing stock and can provide help to businesses reduce emissions and adapt to Climate Change.

The Council can also influence the numbers of short journeys taken by car by making walking and cycling more attractive, which links to the wider health agenda. Recent local research in South Ribble and Preston has shown that cycling has the greatest potential to replace local journeys by car.

Its waste services are a high profile service that has a positive impact on reducing emissions through successful recycling.

Given the wide range of services and activities that the Council is involved in there is a great opportunity to communicate how it is approaching the issues of climate change when promoting itself.

Unfortunately, it is likely that the Emergency Planning function of the Council will be called on more often as a result of the unavoidable impacts of climate change.

# Theme Three: The Council As A Community Leader

The Council is identifying the significant environmental risks it faces and developing plans with partners to mitigate and manage them.

The majority of the Council's work will take place in partnership with the Chorley Partnership.

In addition, it must take every opportunity to take a Leadership role in supporting the joint objectives of the water, energy, business industries, and Community and

Voluntary Organisations as well as the local health authorities to adapt to Climate Change.

Appendix 4 sets out examples of this role in more detail, in particular in relation to opportunities working with the business sector in improving its practices.

### Conclusion

The Council is well placed to take a central role in reducing its carbon emissions, influencing others to reduce theirs and to ensure that the impacts that will happen will have the least effect as possible.

To do this, Climate Change must be a central aspect of the Council's work. Its Members and Officers must be fully aware of the threat and given a framework and training which allows decisions to be made that reduces its impact on the environment and prepares it for potential future local and global climate changes.