

Solihull Council Climate Change Strategy

2009

Foreword

By the Leader of the Council

Solihull Council is committed to tackling climate change both through reducing its own carbon footprint, through planning to adapt to the impacts of a changing UK climate and by leading action on climate change.

We will be a Council that is recognised across the borough and the region as leading by example in combating climate change.....

.....through adopting zero carbon and zero waste practices.....

.....in a community that embraces change and where sustainable lifestyles have become the social and cultural norm.....

.....with a business sector that invests in the future and adopts low-carbon and alternative working and learning practices.....

.....with an education sector that fosters sustainable behaviours from an early age.....

.....with a transport system that reduces dependence on the use of private vehicles and actively encourages the use of public transport, cycling and walking...

.....and where opportunities presented by climate change are embraced and support the delivery of a low carbon society.

“Every member of staff has a duty to help the Council to reduce its carbon footprint by saving energy and water, reducing waste and by adopting more environmentally friendly working practices”

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1. Introduction

Climate Change is the greatest long-term challenge facing the world today, and will affect all residents, public and private businesses and visitors to the borough.

The Prime Minister, Rt Hon Gordon Brown MP, set out the challenge when he said:

“Our mission is, in truth, historic and world changing – to build over the next fifty years and beyond, a global low carbon economy. And it is not overdramatic to say that the character and course of the coming century will be set by how we measure up to this challenge”

Government believes that the unique features of local government – its democratic mandate, its close proximity to citizens through the services it delivers, its regulatory and planning responsibilities and its strategic role working with public, private and voluntary sector partners, and regional bodies – mean that it is on the frontline in tackling climate change.

1.1. Our Strategic Vision

Solihull Council acknowledges that climate change is occurring and that it will have far reaching effects on people and places within the borough, the economy, society and the environment. To meet the challenge, the Council must involve every council department, officer and elected member in reducing its carbon footprint and ensuring it is able to cope with a changing UK climate.

The three key strategic aims of the Climate Change Strategy are:

- 1. Reduce the Council’s carbon, waste and water footprint**
- 2. Understand the impact climate change may have on Council buildings, land and services and identify how they can be adapted to ensure future delivery of service**
- 3. Lead the community in tackling climate change through direct influence, communication and engagement**

Whilst this is not intended to be a borough wide climate change strategy the Council recognises its role in directly influencing and encouraging actions throughout the borough.

1.2. Demonstrating Commitment

The Council's commitment to act on climate change was first demonstrated when it became a signatory of The Nottingham Declaration on Climate Change, which committed the Council to:

- Publicly declare, within appropriate plans and strategies, the commitment to achieve a significant reduction of greenhouse gas emissions from our own authority's operations, especially energy sourcing and use, travel and transport, waste production and disposal, and the purchasing of goods and services
- Assess the risk associated with climate change, the implications for our services and our communities and adapt accordingly

This Climate Change Strategy is embedded within the Council's Sustainability Action Plan and is the first milestone in a longer-term aim to develop a borough wide response to climate change. This will be achieved with other members of The Solihull Partnership and will be guided by the principles embedded in Solihull's Sustainable Communities Strategy which recognises the need for carbon emissions to be reduced and for the borough to be prepared for the impacts of climate change.

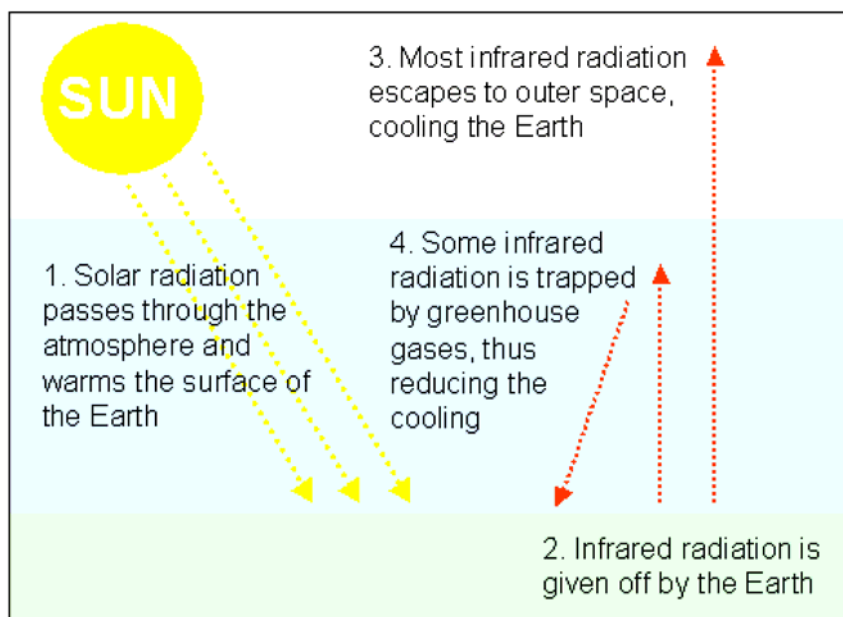
2. What is climate change?

Climate refers to the average weather experienced over a long period, typically thirty years. This includes temperature, wind and rainfall patterns. One of the natural processes that affects the Earth's climate is the Greenhouse Effect, where naturally occurring gases such as carbon dioxide (CO₂), methane and nitrous oxide absorb infrared radiation from the sun and trap it as heat in the atmosphere.

Whilst the Greenhouse Effect is natural, humans are emitting 'greenhouse gases' such as CO₂ at much higher rates than has occurred for tens of thousands of years. These higher levels of greenhouse gases are absorbing more infrared radiation from the sun therefore trapping more heat and as a result affecting temperatures and weather patterns experienced on Earth. This impact on temperature and weather patterns is what we refer to as Climate Change. It is now widely acknowledged that the changes in climate we are experiencing today are a result of human rather than natural drivers:

"Most of the observed increase in global average temperatures since the mid-20th century is very likely due to the observed increase in anthropogenic (man-made) greenhouse gas concentrations." (IPCC, Fourth Assessment Report, 2007, Summary for Policy Makers, p.10)

Figure 1: The Greenhouse Effect



2.1. Impacts of a Changing Climate

As well as large-scale environmental impacts, climate change has social, economic and financial implications. The Stern Review (2005) on the economics of climate change identified that inaction on climate change could result in the loss of 5% global GDP each year, with this rising to 20%, when wider risks and impacts are considered.

The heat wave across Europe in 2003 resulted in dramatic increases in hospital admissions and over 22,000 premature deaths¹ due to overheating, dehydration and other health conditions affected by, or the result of, overheating. The UK is now twice as likely to experience similar hot summers, and by the 2040s more than half of the UK's summers are expected to be warmer than in 2003².

A report on the impact of climate change on the West Midlands³ identified water management, agriculture, energy, land use, the built environment and transport as key areas in the region that will be affected by climate change. It suggests that with average temperatures set to increase by between 1.5 and 4.5 degrees Celcius the region will benefit from more opportunities to live an outdoor lifestyle. Tourism and the use of outdoor recreational facilities may increase. There will also be employment and new business opportunities in the expanding environmental goods and services sectors as a result of the growing adoption of energy saving measures in the domestic, industrial and commercial sectors.

Heavy rain and severe flooding experienced in the West Midlands in June-July 2007 highlighted the impact that extreme weather events have on households, communities and business. There are significant financial implications related to insurance and the future acceptance of weather related claims against policies. According to the Association of British Insurers, heavy rainfall in the Autumn of 2000 resulted in damage to 10,000 UK properties and nearly £1 billion of insurance claims.¹

The legal system is also engaging in the climate change debate and developing new areas of law in relation to insurance claims for damages and the emergence of a new 'carbon finance' sector. Emergency planners and support services need to continue to be prepared for climate change related events and the health, safety and financial implications these events have on the Council and local people.

1 Association of British Insurers, Financial Risks of Climate Change Summary Report, June 2005.

2 Association of British Insurers, Financial Risks of Climate Change Summary Report, June 2005.

3 Potential Impacts of Climate Change in the West Midlands, Entec UK Ltd, 2004

2.2. The Response

“Addressing the challenges associated with climate change requires an integrated approach – both limiting the magnitude and rate of change and dealing with residual impacts and opportunities”.⁴

2.2.1. Mitigation

The act of mitigation sets out to prevent climate change by preventing further carbon entering the atmosphere. This can be accomplished through reducing the amount of greenhouse gases emitted or by removing greenhouse gases from the atmosphere. Actions to reduce emissions are usually achieved through substitution of fossil fuels with renewable energy sources (for example, solar energy) or by using energy more efficiently. Actions to remove greenhouse gases from the atmosphere are not at present widely used but include carbon capture and sequestration (i.e. pumping carbon into underground storage such as oil reservoirs) or using natural biological processes.

2.2.2. Adaptation

We are already committed to a certain level of climate change due to the CO₂ and other greenhouse gases we have emitted in the past and continue to emit today. Therefore it is important that we adjust our natural and human systems to expected climate impacts and take advantage of any opportunities presented (e.g. longer growing seasons). In the UK, the necessity of adapting to climate change is already clear to see with more extreme weather events such as flooding and heatwaves becoming more regular occurrences. A response must be made to reduce the environmental, social and financial costs of these extreme events.

2.3. National and Regional Perspective

The Climate Change Act, passed on the 26th November 2008, puts into statute the UK’s targets to reduce carbon dioxide emissions by 80 per cent by 2050 and at least 26 per cent by 2020 against a 1990 baseline. Action on adaptation is also identified as a key provision with public bodies now expected to assess potential climate risks and draw up plans on how to address these risks.

The Regional Climate Change Action Plan sets targets for reducing carbon emissions by sector along with a regional target for renewable energy equivalent to 5 per cent of regional electricity consumption by 2010 and 10% by 2020. In addition it identifies actions

⁴ UKCIP, Identifying Adaptation Options

required to tackle climate change and identifies leads to take the identified actions forward.

This Climate Change Strategy has been developed with consideration of Birmingham's Climate Change Strategic Framework (launched in June 2008). Birmingham's Strategic Partnership has recently pledged to cut Birmingham's CO₂ emissions by at least 60% by 2026. The Birmingham city-region, including Solihull, Birmingham and neighbouring local authorities, also has a target to move towards carbon neutrality by 2040.

Increasingly, government ministers are placing a higher expectation on local authorities to play a part in contributing to national targets. This is evidenced by the inclusion of the following indicators in the new performance framework for local authorities and local authority partnerships:-

NI 185 - CO₂ reduction from Local Authority operations

NI 186 - Per capita CO₂ emissions in the LA area

NI 187 - Tackling fuel poverty

NI 188 – Planning to Adapt to Climate Change

UK and regional targets for CO₂ reduction and legislative drivers for local authorities are outlined in more detail in Annex 1.

3. What does climate change mean for Solihull?

Action on climate change will benefit every individual who lives, works and visits Solihull borough.

Three key aims form the basis of the Council's Climate Change Strategy: The reasons for choosing these key aims are discussed in this section:

3.1. Key Aim 1

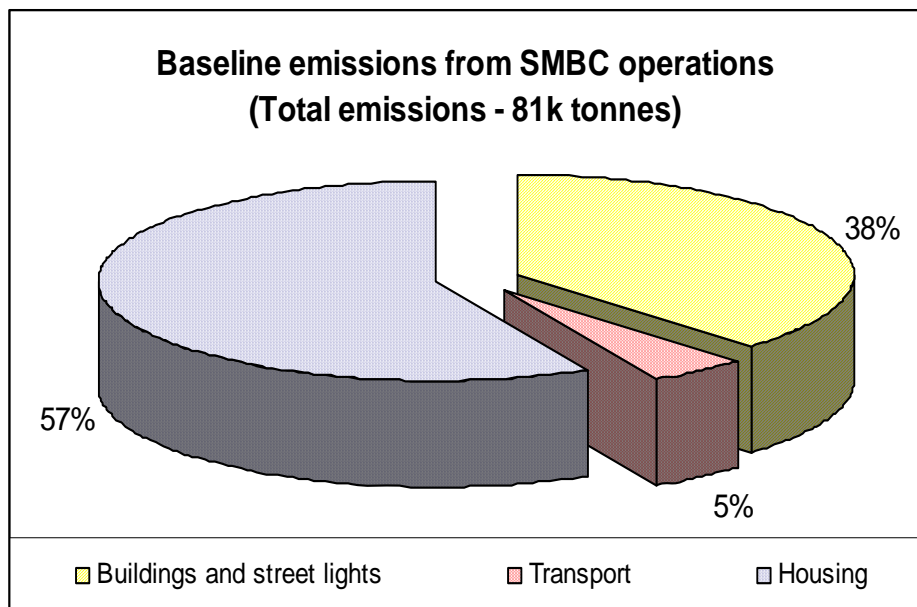
Reduce the Council's carbon, waste and water footprint

CO₂ is released when fossil fuels such as coal, oil and natural gas are burned for energy to heat and light buildings and streets, power appliances and machinery and fuel transport.

The Council produced 34,000 tonnes of carbon dioxide emissions in 2007. The majority of this was produced by the Council's buildings and the borough's street lighting, emitting about 30,000 tonnes, with the transport used to carry out the Council's operations contributing 4,000 tonnes. In addition, the housing that the Council provides through Solihull Community Housing emitted a further 46,000 tonnes.

The Council's draft Carbon Management Plan has set a provisional target of a 33% reduction in carbon dioxide emissions covering the period 2008 -2013.

Figure 2 – Baseline emissions from Council operations



Therefore the Council must

- **Reduce the need for consumption of energy, water and the production of waste**
- **Encourage energy and water saving, and waste reduction behaviour**
- **Use low/zero carbon sources of energy and measures to recycle used water**

3.2. Key Aim 2

Understand the impact climate change may have on council buildings, land and services and identify how they can be adapted to ensure future delivery of services

The impacts of climate change are becoming more and more apparent in the UK and a recent report by Entec Ltd (2004) identified some of the key impacts in the West Midlands:

- Higher temperatures in summer will increase demand for water; reducing water availability and drying out soils. Dry soils will increase the risk of building subsidence
- Buildings overheating, especially in urban areas, will pose health risks at home and reduce workplace productivity.
- Higher winter temperatures will reduce the need for winter heating and lower winter energy bills at home and work, but higher summer temperatures will increase demand for energy for cooling, leading to higher summer fuel bills.
- There may be greater opportunity for outdoor recreation, tourism and leisure activities.
- Longer growing seasons, will provide opportunities to grow new types of plants. Plant sensitivity to higher temperatures/ wetter winters and changes to planting and growing seasons will require adjustments to the management of parks, roadside green spaces and gardens.
- Increased pressure on biodiversity and fragmented habitats.⁵

Therefore the Council must.....

- **Identify the impact of past weather events on local services**
- **Using future climate projections identify the services that are most at risk**
- **Assess resilience and identify how buildings, land and services can be adapted to ensure future risk is minimised**

3.3. Key Aim 3

Lead the community in tackling climate change through direct influence, communication and engagement

The Council's CO₂ emissions represent only a small percentage of the borough's greenhouse gas emissions however it is important that we lead by example and develop policies which will lead to an effective response to tackling climate change. This is especially important as the Solihull average CO₂ emissions of 2.6 tonnes per person is higher than the West Midlands average of 2.4 tonnes per person.

There is still a lack of understanding about how climate change will impact on the public, residential and business sectors. The Council intends to improve this understanding of the risks and benefits to the borough and will communicate these to the wider community.

3.3.1. New Housing

Solihull Borough is not static and the population, businesses within the borough and needs of residents and visitors change over time. The Council is already involved in regeneration of communities and local business, transport and environmental protection and enhancement. The influence that it can have in shaping these areas of activity will be considered in the detailed planning of actions to meet the challenge of climate change. Solihull has a population of around 202,000 and just fewer than 90,000 residential properties. The draft submission of the Regional Spatial Strategy puts forward a proposal for a minimum of 7600 new dwellings in Solihull from 2006-2026. The Government however, is investigating significantly higher housing options for the West Midlands, which is likely to have an impact on Solihull's housing figures. An increase in housing numbers, business premises and changes in population will increase waste generation and use of energy and increase the use of natural resources.

It is therefore important that new developments are located in sustainable locations and are sustainable in design, construction and operation. The regeneration activity taking place in North Solihull presents a particularly important opportunity to create more sustainable communities.

⁵Restoring the Region's Wildlife – The Regional Biodiversity Strategy for the West Midlands 2005

⁶Restoring the Region's Wildlife – The Regional Biodiversity Strategy for the West Midlands 2005

3.3.2. Existing Housing Stock

However, whilst it is vital to ensure new development is of high quality and sustainable design, new building only represents a small proportion of our overall housing stock. We must therefore ensure we continue to support actions which will to increases the sustainability and in particular the energy efficiency of our existing housing stock.

3.3.3. Energy Consumption

With households purchasing a growing number of new devices and appliances and mechanical cooling systems being used more frequently across the household and business sectors, it is likely that the increase in electricity consumption already seen over past years will continue. The Council therefore has a role to play in encouraging more energy efficient lifestyles.

3.3.4. Transport

Solihull is home to a major international airport and also major road networks from Coventry to Birmingham and from areas of the West and East Midlands to the south via the M42 and M40. Transport is therefore a significant source of CO₂ emissions in Solihull and action needs to be taken on reducing these emissions. There are also issues of air quality, noise and the impact that transport infrastructure has on landscape, local heritage and biodiversity.

3.3.5. Biodiversity

With habitats already fragmented and degraded, climate change will lead to greater pressure on an already threatened biodiversity resource⁷

Therefore the Council must.....

- **Promote Council activity on climate change, local benefits and achievements**
- **Encourage staff, contractors, developers, partners and residents to take action on climate change**
- **Develop policies and initiatives that will ensure effective action on climate change across the borough**

⁷ Local Biodiversity Action Plan for Coventry, Warwickshire and Solihull 2006

3.4. Strategic Framework

Tackling climate change will also support a range of other strategies. For example, actions aimed at reducing emissions from transport through increasing levels of walking and cycling will lead to improvements in health and so support the objectives expressed in health related strategies. The strategy also complements Solihull Community Housing's Climate Change Strategy and Delivery Plan.

In recognition of the importance of taking action to reduce carbon emissions and prepare for the unavoidable impacts of climate change the Solihull Partnership has included National Indicators 185 - CO2 reduction from Local Authority Operations and 188 – Planning to Adapt to Climate Change in its Local Area Agreement 2008-2011.

3.5. Delivering Results

The Council will adopt a structured approach to combating climate change. This will consist of a programme of carbon management and the development of an adaptation response. A key element will be the involvement of staff through the use of communication methods including Solnet, Contact and the weekly News Bulletin and through dedicated awareness raising initiatives such as the Corporate Energy Awareness campaign.

3.5.1. Carbon Management Programme:

To support the delivery of actions aimed at reducing the Council's carbon emissions the Council is taking part in phase 6 of the Carbon Trust's Local Authority Carbon Management Programme. The programme has assisted the Council in producing an emissions baseline (for the year 2007) and has also identified opportunities for carbon savings.

“The Programme has set a provisional target of a 33% reduction in carbon dioxide emissions covering the period 2008 -2013. “

3.5.2. Local Climate Impacts Profile (LCLIP):

In accordance with the requirements of NI 188: Planning to adapt to climate change, the Council is gathering information on how past weather events have impacted on its estate and services. The information will identify the costs incurred and highlight those services and parts of the estate most vulnerable to the risks of climate change. This evidence base will then be used to inform a programme of adaptation measures and initiatives that will enable Council services to plan effectively for the impacts of a changing UK climate.

4. Key Aims and Strategic Objectives

The following actions highlight where the Council can directly, or through policy or its role as community leader, influence change.

(Lead officers and expected timescales currently being finalised)

Key Aim 1: Reduce the Council's carbon, waste and water footprint

- Reduce the need for consumption of energy, water and production of waste
- Encourage energy and water saving, and waste reduction behaviour
- Use low/zero carbon sources of energy and measures to recycle used water

Council Buildings, Infrastructure and Policy

Action
Produce a Corporate Energy Policy and Action Plan for corporate buildings and schools to include:- <ul style="list-style-type: none"> • Baseline figures for annual energy consumption for gas, water and electric.
Improve the monitoring and targeting of energy consumption information via smart meters
As part of the Carbon Trust's Carbon Management Programme produce a Carbon Management Plan including a baseline of CO ₂ emissions from Council operations and opportunities for CO ₂ savings.
Ensure the Council is in a position to calculate its baseline CO ₂ , NO _x (oxides of nitrogen) and PM ₁₀ (airborne particulate matter) emissions for 2008/9 in readiness for reporting progress against National Indicators NI 185 and NI 194
Minimise office waste where possible and increase the amount of office waste recycled. Support the Members Waste and Use of Materials Task and Finish Group established to investigate and make recommendations for reducing waste through, for example more sustainable procurement and increased recycling opportunities.
Adopt approaches to ensure whole life costing and the climate resilience of council buildings (including historic buildings) is taken into account in plans related to the refurbishment or design of new buildings to ensure they function appropriately over their lifetime.
Ensure, through sustainability appraisals, that climate change mitigation is addressed in

all council strategy and policy documents and major projects.
Set minimum environmental sustainability standards for all new development on council land and all council owned/led development. This would build on the requirement that all development as part of the North Solihull regeneration programme reaches Level 3 on the Code for Sustainable Homes.
Explore the potential for the production of biomass energy from waste or wood fuel derived from Council owned woodlands through sustainable woodland management practices.
Use the Flexible Framework contained within the Sustainable Procurement National Action Plan to ensure that procurement mechanisms and processes exploit opportunities to minimise greenhouse gas emissions and detrimental environmental, social and economic impacts and encourage others to do likewise.
Consider increasing procurement of green electricity for Council buildings and services.
Continue to support schools to become more sustainable through the provision of advice on the Government's sustainable Schools Strategy, Education for Sustainable Development, energy conservation, sustainable transport and recycling, through the provision of events and through the promotion of initiatives such as Eco-schools and Healthy Schools.

Vehicles and Staff Travel

Action
Produce a Corporate Sustainable Travel Plan (already approved as part of the wider Sustainability Action Plan) to include:- <ul style="list-style-type: none"> • Staff Travel Plan Survey to inform actions • Measures to reduce the need for business travel • Measures to reduce business mileage • Measures to promote the use of more sustainable modes of transport for commuting
Ensure, where appropriate, 'greener' fleet vehicles are used and promote measures to improve fuel efficiency (e.g. through driver fuel efficiency and travel planning training)

Key Aim 2: Understand the impact climate change may have on Council buildings, land and services and identify how they can be adapted to ensure future risk is minimised

- Identify the impact of past weather events on local services
- Using future climate projections identify the services that are most at risk
- Assess resilience and identify how buildings, land and services can be adapted to ensure future risk is minimised

All Council services

Action
Produce a Local Climate Impacts Profile (LCLIP) or equivalent process to identify those vulnerabilities and opportunities that are significant to the LA/LSP in order to prioritise our adaptation responses. This action will demonstrate progress against NI 188 Planning to Adapt to Climate Change.
Ensure the Council takes advantage of support offered by local and regional agencies including for example that provided by the Local and Regional Adaptation Partnership Board.
Ensure the potential impacts of climate change on transport services and infrastructure are embedded into the Local Transport Plan and other relevant documents.
Ensure that green space and park management is prepared for the local impact of climate change on planting and growing seasons.
Ensure, through sustainability appraisals, that climate change adaptation is addressed in all council strategy, policy documents and major projects
Further develop the existing Green Space Strategy by identifying green corridors and opportunities for linking areas of green space thereby increasing the adaptive capacity of biodiversity to respond to the possible impacts of climate change. This could be delivered as part of a wider Green Infrastructure Study.
Ensure through effective surveying and monitoring (delivered through the Habitat Biodiversity Audit) that we have up to date knowledge of Solihull's biodiversity.
Protect and enhance biodiversity and support the implementation of LBAPs (Local Biodiversity Action Plans) through council operations.
Consider ways in which further protection can be afforded to those LBAP species identified as being at particular risk from climate change.
Consider the need to take account of adaptation to climate change when undertaking

habitat creation and management.

Key Aim 3: Lead the community in tackling climate change through direct influence, communication and engagement

- Promote Council activity on climate change, local benefits and achievements
- Encourage staff, contractors, developers, partners and residents to take action on climate change
- Develop policies and initiatives that will ensure effective action on climate change across the borough

Communication and leadership

Action

As part of the Carbon Management Programme:

- Develop a climate change communication strategy to regularly promote Council activities and achievements,
- Identify key risk areas (identified in local climate vulnerability report) and economic, social and environmental savings (CO₂ and £).

Publicise the launch of the Climate Change Strategy and commitments made to the wider borough.

Ensure Council employees who have responsibility for delivering Climate Change Strategy actions have access to appropriate guidance and/ or training.

Develop links and explore joint activities to tackle climate change with neighbouring local authorities.

Lead and support the Solihull Partnership to take action on climate change and consider the most effective ways of delivering practical guidance to residents, businesses and public sector organisations in relation to mitigation (reducing energy and water use and waste producing) and adapting to the consequences of climate change.

Ensure staff take responsibility for energy and water saving and waste reduction and recycling by including information in new starter induction sessions

Ensure key messages on energy and water saving and waste reduction and recycling are communicated regularly to all staff (e.g. via Contact)

Ensure that public buildings over 1000m² display Energy Certificates prominently in the building, as from 1st October 2008.

Work with SCH to ensure Energy Performance Certificates are available to residents of local authority housing when required.

Support, where appropriate, the delivery of Solihull Community Housing's Climate Change Strategy and Delivery Plan

Ensure through our Waste Strategy that we encourage households to minimise their waste and provide opportunities for recycling.

Non Council Buildings

Action

Deliver the Council's Home Energy Efficiency and Affordable Warmth Strategy to improve the energy efficiency of domestic dwellings in Solihull and work towards the reduction of fuel poverty throughout the borough.

Through the Sustainable Housing Partnership (SHOPAR), communicate the findings of the Regional Impact and Adaptation Partnership heat risk to private social housing providers in the borough.

Through SHOPAR, help social housing providers operating in the borough to access advice, guidance and sources of funding to support climate change key aims. Ensure all include energy and water saving, and waste reduction advice in tenant information leaflets and/ or newsletters.

Development

Action

Ensure the emerging LDF (Local Development Framework) includes policies requiring the adoption of higher standards of sustainable construction - including energy conservation, use of renewable energy sources, reduced water use, improved waste management and use of recycled or reused materials

Consider how best to provide guidance to developers and residents on sustainable design and construction.

In identifying land for development or assessing planning applications, take into account the location of the development and opportunity for access by means other than the private car, access to other local services by sustainable transport and the impact on green infrastructure. Ensure planning officers work closely with employers and school travel advisors to integrate appropriate transport options into the design of the development.

Fully adopt, through the LDF process, the requirement that all development above a prescribed threshold produces at least 10% of its energy supply from on site renewable energy or through similar energy saving design measures

Through the use of planning powers, require developers to locate and design dwellings for

the predicted climate and climate impacts it is likely to experience over its lifetime. For example through the incorporation of Sustainable Urban Drainage, retention of trees, vegetation and green infrastructure to reduce heat island effect.

Ensure Sustainability Appraisals (West Midlands Sustainability Checklist or similar) are submitted for all major planning applications as per adopted Local Validation Criteria.

Ensure natural floodplains are enhanced and protected through policies in the LDF and ensure no development which would increase flood risk is approved contrary to Environment Agency advice.

Business

Action

Help businesses identify and realise the opportunities and risks of the changing climate for their markets, products, premises, people and logistics

Support businesses in improving resource efficiency (energy, transport, waste and water) and realise opportunities to diversify into low-carbon products and services.

Increase the number of local 'businesses' engaging in Corporate Social Responsibility activities through the Solihull Footprint initiative.

ANNEX 1: KEY LEGISLATIVE DRIVERS

Europe

European strategy for energy security and tackling climate change:

This agreement commits the EU to a binding target of reducing greenhouse gas emissions by 20% from 1990 levels by 2020 and by 30% in the context of international action. The European Council agreement also sets a target for 20% of the EU's energy to be from renewable sources by 2020. The target covers the energy to be used in heat and transport, as well as electricity. This agreement is binding for all EU members. The UK has extended its commitment in the draft Climate Change Bill published March 2007.

Carbon Reduction Commitment (CRC):

Announced in the Energy White Paper 2007, the commitment will apply mandatory emissions trading to cut carbon emissions from large commercial and public sector organisations (including supermarkets, hotel chains, government departments, large local authority buildings) by 1.1 MtC / year by 2020.

The CRC will apply to large organisations whose annual metered electricity use is above 6,000MWh. The CRC will mean that an organization consuming 6,000MWh of electricity and 1,050MWh of gas would have to buy allowances of £22,000 per year on top of its utility bill.

Energy Performance Certificates (EPCs):

Part of the European Energy Performance of Buildings Directive, Energy Performance Certificates apply to all domestic and non-domestic buildings when built, sold or rented out. The Certificate includes an energy performance rating and recommendations for cost effective improvement measures that may be undertaken to improve this rating and lower the buildings CO₂ emissions. From 10th September 2008, an EPC must be made available for all dwellings with three or more bedrooms marketed for sale. Public authorities or institutions providing public services occupying buildings over 1,000m² are required to display Energy Performance Certificates from April 2008. All other dwellings and non-domestic buildings must present an EPC from October 2008.

United Kingdom

UK Climate Change Bill (draft): The UK is committed to reducing emissions further and in

March 2007 published a Climate Change Bill. This will put in place statutory national carbon dioxide emissions reduction targets of 26-32% lower than 1990 levels by 2020, and 60% lower by 2050, with a series of 5 year 'carbon budgets' setting out the path to the achievement of this target. On the 28th October 2008 the Bill was further amended to include a tougher target of an 80 per cent cut in carbon dioxide emissions by 2050

Stern Review on the Economics of Climate Change, October 2006: examines the evidence on the economic impacts of climate change and explores the economics of stabilising greenhouse gases in the atmosphere. From all the evidence gathered, the Stern Review made a simple conclusion - that the benefits of strong, early action on climate change outweigh the costs and the earlier effective action is taken, the less costly it will be.

2016 Zero Carbon Homes (England Only): Target for all new homes to be built to Code for Sustainable Homes level 6 (zero carbon) by 2016.

Building Regulations (England & Wales) Part L: Proposals to increase energy efficiency standards for new dwellings in line with energy performance standards in Code for Sustainable Homes. In 2010, this would mean Regulations require 25% higher energy performance than 2006 Regulations, in 2013 44% higher and in 2016 around 149% (2016 likely to include emissions from other sources e.g. electrical appliances) therefore significant low or zero carbon generation capacity will be needed.

Code for Sustainable Homes: The Code introduces a single national standard to be used in the design and construction of new homes in England. Based on the BRE's EcoHomes standard, adoption of the Code is intended to encourage continuous improvement in sustainable home building.

There are six Code levels awarded on the basis of achieving both a set of mandatory minimum standards in each Code category and a minimum overall score. Mandatory standards are in excess of the minimum needed to satisfy Building Regulations.

The Code is also likely to form the basis for future developments of Building Regulations in relation to carbon emissions and energy use in homes.

Climate Change and Sustainable Energy Act: The principal objective of the Act is to enhance the UK's contribution to tackling climate change. It also aims to help alleviate fuel poverty, promote micro-generation and the use of heat produced from renewable sources. Local authorities and parish Councils are highlighted as having a key role to play; energy efficiency, micro-generation and community energy schemes are also featured.

Home Energy Conservation Act: Requires every UK local authority with housing responsibilities to prepare, publish and submit to the Secretary of State an energy

conservation report identifying practicable and cost-effective measures to significantly improve the energy efficiency of all residential accommodation in their area; and to report on progress made in implementing the measures. The Act gave powers to the Secretary of State to provide energy conservation authorities with guidance in relation to what energy efficiency improvement was to be regarded as 'significant'. This was confirmed in March 1996 as being 30% over 10 years, measured from a 1 April 1996 baseline, subsequently extended to 10-15 years.

UK Climate Change Programme, 2006: Sets out policies and the priorities for action in the UK. It identifies local authorities as a key sector for action, and critical to the achievement of Government climate change objectives. It introduces a number of new supporting measures and incentives for local authorities.

Sustainable Construction Strategy (consultation draft): Three driving principles – sustainable construction and production, climate change and energy and natural resources and enhancing the environment and sustainable communities. In relation to climate change and energy, the vision is

- An industry, which minimises carbon emissions during construction
- An industry, which is developing processes that will lead to the construction of zero carbon buildings.
- An industry, which uses innovative solutions to address the climate change challenges for the future.

Housing Green Paper (consultation document): The Housing Green Paper outlines Government plans for delivering new and affordable homes. Key priorities include; more homes, more social housing, building homes more quickly, more affordable homes, and greener homes.

Regional: West Midlands

Carbon neutral city region: Solihull is part of the Birmingham, Coventry and Black Country city-region. The city-region is working towards carbon neutrality as part of its City Region Development Plan (CRDP).

Regional Sustainable Development Framework (RSDF): Provides a framework to help ensure that policies and plans contribute towards a sustainable future for the Region. The RSDF sets out a vision and a set of sustainable development objectives that include climate change and energy conservation. It also sets out a process by which these principles and objectives can be incorporated into the development, review and

implementation of strategies and plans.

Regional Spatial Strategy (under review): Proposed amendments to Chapter 2, to incorporate policies and targets relating to Climate Change, Sustainable Communities and Sustainable Construction. Policies will set framework for local planning authority documents including requirements for on site generation of energy, sustainable design, supporting green transport and opportunities to support green infrastructure.

Regional Climate Change Action Plan (consultation draft): This will set out the actions required to mitigate (reduce greenhouse gas emissions) and adapt to climate change at the regional level in the short term. It will also review of regional and sub-regional targets for reducing greenhouse gas emissions, currently outlined in the *Regional Energy Strategy*.

Local: Solihull MBC

Local Area Agreement (LAA) 2008-10: The LAA, Delivering A Place for People, contributes to the delivery of the nine objectives of the Community Strategy and sets tangible targets for progress across four themes.

- The LAA contains a statement on sustainability in Solihull, giving a commitment to work toward national objectives. It outlines current and future activity including:
- The development of a Climate Change Strategy and action plan for Solihull
- Progress being made through the North Solihull regeneration programme
- A commitment to requiring the use of renewable energy sources in some new developments (following the Merton rule) and a commitment to exceed the requirements of the Building Regulations on heating and insulation.

Nottingham Declaration on Climate Change: In February 2007, the Council signed the Nottingham Declaration and pledged to actively tackle climate change in Solihull by working with partners to tackle its causes and effects.

North Solihull Regeneration area: Over the next 15 years, this area will see the construction of 8000 new homes, half of which will replace existing properties. This is clearly an outstanding opportunity to improve the energy efficiency of the housing stock in the area and offer residents new homes, which are cheaper to heat, thereby reducing risk of fuel poverty. A Design Code has been introduced for the regeneration area. This requires all new residential development as a result of regeneration activity to attain at least level 3 of the Code for Sustainable Homes. This will be revised on a regular basis

with the expectation that developers will better level 3 over time. There will also be continued investment in existing homes through Decent Homes Programmes.

Local Development Framework (LDF): LDFs and other local planning documents will be guided by policies within the Regional Spatial Strategy. Solihull MBC is considering requirements for on site generation of energy or are requiring minimum standards of environmental design on specific sites e.g. BREEAM/Eco-Homes (latter now Code for Sustainable Homes).

Local Authority Corporate Area Assessments (CAA): From 2009, the Government will introduce comprehensive area assessments (CAA) for local government performance. Areas will be assessed according to 198 national indicators of which 35 will be included in a Local Area Agreement. In addition to those indicators outlined on page 6 the indicator set includes NI 189 Flood and coastal erosion risk management, NI 191 Residual household waste per head, NI 192 Household waste recycled and composted,

NI 193: Municipal waste to landfill, NI: 194 Level of air quality – reduction in NO_x (oxides of nitrogen) and primary PM₁₀ (airborne particulate matter) emissions through local authority's estate and operations, NI 197: Improved local biodiversity – active management of local sites, NI198: Children travelling to school – mode of travel usually used

Joined-up working will be built into the new system of CAA because assessments will look at the whole area rather than just the performance of the local authority.