



# West Midlands Regional Climate Change **Action Plan**

December 2007



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## Foreword

I am pleased to present the West Midlands Regional Climate Change Action Plan.

Recent events have shown dramatically how vulnerable the UK is to extreme weather. At the same time, climate change is receiving increasing recognition as the most significant challenge of our times. Evidence is mounting that human emissions of greenhouse gases are causing rapid rises in global temperatures, and it is increasingly clear that the effects will be felt in the immediate as well as the distant future.

It is a fundamental challenge for the West Midlands to secure a sustainable future, by significantly reducing emissions, becoming a low-carbon economy and ensuring we are well adapted to the unavoidable effects of the climate change that is already happening. It is a challenge that as a region we are well equipped to take on, but it will require co-ordinated action, delivered and supported by regional agencies, local government, businesses, public-sector organisations and individuals across the West Midlands.

The Regional Assembly has led the development of this Climate Change Action Plan to provide a first step in a programme of work to ensure that regional working addresses the challenges posed by climate change. Delivery of the Action Plan will be led by a Climate Change Panel of partners including Advantage West Midlands, the West Midlands Regional Assembly, West Midlands Local Government Association, Government Office for the West Midlands, the Environment Agency and Natural England, accountable to the Regional Minister for the West Midlands. The support of partners in delivering the Action Plan will be essential, so I urge you to consider how you and your organisation can help achieve the goals set out here.

The Action Plan identifies lead organisations to take forward each action, and I encourage these and other organisations to work closely with the Regional Climate Change Panel to identify ways in which they are able to contribute towards the implementation of the Action Plan.

The Regional Assembly is grateful to the many partners who have contributed to this draft Climate Change Action Plan.

Cllr Keith Austin

**Environment Portfolio Holder  
West Midlands Regional Assembly and  
West Midlands Local Government  
Association**



## Additional foreword from Liam Byrne MP

Climate Change is widely accepted to be one of the most far reaching, and potentially threatening global challenges facing us today. The warnings in the Stern and Intergovernmental Panel on Climate Change reports cannot be ignored, nor can the growing and compelling body of scientific evidence that highlights the drastic changes that our climate has undergone in recent years.

For this reason, Government has committed itself to clear and ambitious targets, set out in the Climate Change Bill. But the truth is we cannot hope to meet these national targets if we do not see concerted effort from every region. As regional minister I am committed to do all that I can to see that this region plays its part to drive forward a lower carbon economy.

I will therefore monitor closely the regional Climate Change Panel over the next three years, and I know that with committed and enthusiastic partnership working from its members and various delivery organisations, we can together ensure the effective delivery of this Climate Change Action Plan and build a sustainable future for everyone in the region.

Liam Byrne MP

**Minister for the West Midlands**





# 1 Introduction

The Government's Chief Scientific Advisor, Sir David King, has described climate change as "the most serious problem we are facing today".

The climate change that was observed over the 20th Century is outside the boundaries of what would be expected through natural variation, and the scientific consensus is established that the changes we are experiencing are largely due to releases of greenhouse gases such as carbon dioxide into the atmosphere from human activity.

Human-induced climate change is happening. The challenge now is to make a difference. Our region is widely acknowledged as the birthplace of the industrial revolution, and through a history of innovation and industry fired by fossil fuels, has contributed significantly not only to a better modern society with higher standards of living, but also to the causes of climate change. Our intention now is that the West Midlands should rise to the challenge and play its part in tackling the problem.

In October 2006, the West Midlands Regional Assembly became the first Regional Assembly to sign up to the Nottingham Declaration on Climate Change. This commits the Assembly to produce with partners a plan of action to progressively address the causes and impacts of climate change.

This Action Plan, prepared with the input of many regional partners (see Appendix 3) will fulfil that commitment. However, the Action Plan is only the starting point. It can deliver real progress, but only if its delivery is undertaken and supported by local authorities, organisations, businesses and individuals throughout the Region.



## 2 The Need for Action Now

The impacts of climate change will not be restricted to the distant future or to far-flung locations elsewhere in the world. The cities, towns, villages, landscape and biodiversity of the West Midlands will all be affected. We are already experiencing extreme weather events of increasing frequency and severity. Within the next few decades, we will regularly be experiencing longer, hotter, drier summers; warmer, wetter winters; and more frequent extreme weather events leading to more flooding, higher wind speeds and stormier weather. We must plan to adapt to these changes.

In order to play our part in avoiding even more extreme climate impacts, we must reduce our emissions of greenhouse gases. We already have international, national and regional targets for reductions in emissions of carbon dioxide (CO<sub>2</sub>) and other greenhouse gases, including a national target to reduce emissions of carbon dioxide to 60% below 1990 levels by 2050, and

recent scientific evidence suggests these targets may not be sufficient to prevent dangerous levels of climate change. We must work together to meet and exceed those targets here in the West Midlands.

We can use our heritage of innovation and enterprise to take advantage of the opportunity we now have to lead the development of low-carbon technologies and solutions. Research suggests that climate change could be a £30bn opportunity for British business over the next ten years and that low-carbon technologies will be worth at least \$500bn to the global economy by 2050. In 2006, the Stern Review of the Economics of Climate Change concluded that failure to tackle climate change could result in economic costs of up to 20% of GDP per year, now and forever. In comparison, the costs of effectively tackling climate change could be limited to only 1% of GDP per year.





### 3 Climate Change Targets

As part of the Kyoto Protocol, the UK has agreed to ensure annual greenhouse gas emissions are at least 12.5% below 1990 levels in the period 2008-2012.<sup>1</sup>

In March 2007 EU Heads of State agreed greenhouse gases must be reduced by 20% by 2020 from 1990 levels.

The UK government has set a number of further domestic targets to reduce carbon emissions, including:

- A reduction in carbon dioxide emissions by 20% from 1990 levels by the year 2010.
- A reduction in carbon dioxide emissions to 60% below 1990 levels by 2050, with “real progress” by 2020.
- Renewable energy to provide 10% of domestic electricity requirements by 2010 and 15% by 2015, with an aspiration of 20% by 2020.

The Government’s draft Climate Change Bill proposes a system of rolling 5-year “carbon budgets” similar to the Kyoto target. This system is intended to ensure a consistent downward trend in carbon emissions towards the 2050 target. The Bill also proposes a duty to report every five years on adaptation measures.

As well as setting targets, the Government has sought to address climate change through a number of policy initiatives, including planning policy, the Energy White Paper, and “Securing the Future”, the UK Sustainable Development Strategy.

In the West Midlands, the Regional Energy Strategy sets targets for reducing carbon emissions by sector along with a regional target for renewable energy equivalent to 5% of regional electricity consumption by 2010. This reflects the region’s limited capacity for deployment of some of the currently most cost effective technologies such as offshore wind, and the emphasis on energy efficiency as the key priority.

Based on emissions created within the boundaries of the West Midlands, regional carbon emissions have been estimated at 9.4 tonnes per person, per year (UK average 10.8t). Taking into account energy, goods, and services consumed within the West Midlands but produced elsewhere, regional carbon emissions are estimated at 11.5 tonnes per person, per year (UK average 11.9t)<sup>2</sup>. Although on either measure West Midlands emissions are slightly lower than the UK average, we still need to make substantial cuts at least in line with national and international targets.

<sup>1</sup> See the Glossary at Appendix 2 for a definition of the distinction between international targets for greenhouse gases and national targets for carbon reductions.

<sup>2</sup> “Counting consumption: CO<sub>2</sub> emissions, material flows and Ecological Footprint of the UK by region and devolved country”, Ecological Budget UK, 2006

## 4 Our Climate Change Vision

Our Vision is of a *sustainable, low carbon West Midlands, well adapted to the impacts of climate change and supported by a low-carbon economy* where:

- Regional emissions of carbon dioxide and other greenhouse gases are significantly reduced;
- We have identified and adapted to the likely implications of climate change for the West Midlands;
- Quality of life and environment has been improved for people in the West Midlands, without compromising future generations;
- The region's economy is enhanced by increased efficiency, delivering higher productivity with lower resource use, and the existing economic base has been enabled to grow and diversify into new low-carbon product and service markets;
- Regional partners demonstrate effective leadership, championing the climate change agenda across all sectors, communities and organisations.



## 5 Regional Climate Change Action Plan 2007-2010

This Action Plan is not a strategy and does not define policy. Instead, it sets out the actions that regional organisations can and should take over the next three years to move towards a position where all regional policy addresses the causes and impacts of climate change as a central objective.

Delivery of the Action Plan will include the development of regionally-specific climate change objectives, which will be incorporated within and delivered through the implementation of regional strategies and policies.

The Action Plan is concerned with action that is **regional in scale** and **regionally appropriate**. Therefore, the focus is on actions for which regional bodies can be held accountable within their existing powers and responsibilities. The Action Plan aims to set out the steps required to establish a supportive strategic framework at regional level that enables, encourages and supports positive action at the most appropriate level (usually local or sub-regional). It will not define detailed actions at sub-regional and local level.

We need to ensure that all regional policies are consistent with our Vision and that we take all practical steps possible to reduce the level of greenhouse gas emissions from the West Midlands, adapt to future climate change and promote the economic

opportunities arising from the deployment of low-carbon technologies. In the short term, this Action Plan will influence the ongoing review of the Regional Spatial Strategy. In the medium term, it will play an essential role in informing the development of the single Integrated Regional Strategy proposed in the Review of Sub-National Economic Development and Regeneration, which will incorporate spatial planning, transport, housing and waste policy as well as economic development.

We must ensure that arrangements are in place to provide leadership and accountability, and that the mechanisms required to deliver the Action Plan are secure and adequately resourced. The Action Plan will be supported by the establishment of a regional Climate Change Panel, responsible for overseeing delivery of the Action Plan. The Panel will include representation from Advantage West Midlands, the Regional Assembly, West Midlands Local Government Association, Government Office West Midlands, the Environment Agency and Natural England, and will be accountable to the Regional Minister for the West Midlands. This is intended to provide a structure that will be fit for purpose under the likely changes to regional arrangements post-2010 set out in the Review of Sub-National Economic Development and Regeneration.

Regional partners also recognise that we must exemplify good practice through our own actions and communicate the benefits of those actions if we are to educate and influence other regional stakeholders and the wider public.

Although a regional Climate Change Action Plan can capture some of the diverse actions required to address the causes and impacts of climate change, complementary actions will need to be taken locally, nationally and internationally if the vision is to be achieved on a global scale. We welcome the increasing priority that is being placed at all levels on tackling climate change, and recognise the many examples of very good work already taking place in the Region, particularly at local level. This Action Plan is intended to identify new actions, adding value to the work that is

already taking place, rather than summarise all of the work that is currently ongoing. It is also intended that each action will inform further work and new activity as the plan is progressed.

Each action in the Action Plan has a lead organisation(s). The lead organisations will be responsible for ensuring the delivery of that action, with assistance from supporting partners. The lead organisation will be responsible for defining the detailed steps required to deliver each action, including securing the necessary funding and partner input. It will also be responsible for reporting to the Region on progress and barriers.

## 6 Priorities for Action

Six regional climate change priorities have been identified to guide early action and enable the Region to move towards a well-adapted, low-carbon future. Each of these priorities is supported by a number of regional actions, which are outlined on the following pages. Our climate change priorities for action are as follows:

- **Planning and Environment:** Plan for low-carbon, well-adapted sustainable communities with high quality green infrastructure and thriving biodiversity, with low-carbon new development, improved existing stock, and sustainable transport and waste planning to deliver substantially reduced emissions and resilience to likely climate change impacts.
- **Economy:** Facilitate the transition to a low-carbon economy by promoting energy efficiency and low-carbon energy generation, increasing take-up of low-carbon technologies, removing barriers to new technology investment, supporting the development of environmental technology and low-carbon business sectors, and enabling businesses to prepare for the opportunities and risks of a changing climate.
- **Implementation:** Ensure the delivery of substantial carbon reductions and climate change adaptation measures by removing barriers and providing appropriate support and incentives for regional, sub-regional and local delivery agents.
- **Leadership:** Ensure that regional partners lead by example by significantly reducing carbon emissions from their own premises, activities and services and by ensuring that their assets and services are resilient to likely climate change impacts.
- **Communication:** Increase awareness and understanding of the implications of Climate Change and appropriate mitigation and adaptation actions for the West Midlands amongst regional policy-makers, public sector organisations and businesses.
- **Targets and monitoring:** Where there are gaps in national monitoring or where Regional accountability is required for progress, establish appropriate regional carbon reduction targets and adaptation goals, and a robust and transparent framework for monitoring and reviewing progress.

Detailed actions to support each of these priorities are set out in the following table.



**Planning and Environment:** Plan for low-carbon, well-adapted sustainable communities with high quality green infrastructure and thriving biodiversity, with low-carbon new development, improved existing stock, and sustainable transport and waste planning to deliver substantially reduced emissions and resilience to likely climate change impacts.

| <b>Action:</b>   | <b>Timescale</b>     | <b>Review</b>      | <b>Lead</b>   |
|--|----------------------|--------------------|---|
| P1. Ensure that revisions to the Regional Spatial Strategy (including Transport and Waste) and Regional Housing Strategy effectively address the need to reduce emissions and adapt to unavoidable climate change impacts over the coming decades, providing a robust regional framework to support local planning authorities in developing appropriate local planning, housing, transport and waste policy     | End Phase 3 revision | As RSS is reviewed | WMRA  |
| P2. Raise design and environmental standards for new build funded by regional partners' capital investment programmes, in order to improve the quality of the built environment through the roll-out of the West Midlands Sustainability Checklist for developments, and other measures  | End 2008             | 2010               | AWM with WMRA, WMCCE & RegenWM support                      |
| P3. Work with local authorities to promote development schemes that are exemplars of sustainable development and construction, setting the highest standards of design, effectively incorporating green infrastructure, which are low-carbon or carbon neutral in operation and adapted to likely climate impacts in line with the forthcoming Planning Policy Statement on Climate Change                       | Immediate            |                    | WMRA/GOWM/ Natural England, with Local Authorities          |
| P4. Scoping report to identify potential to improve the energy demand and resilience to likely climate impacts of existing building stock, and for regional agencies to support or add value to work already ongoing at other levels, building on previous work by the Sustainable Housing Action Project  | March 2009           |                    | Regional Housing Executive/ Regional Housing Advisory Forum |
| P5. Scoping work to inform future developments in regional transport working, including transport elements of a future integrated regional strategy, identifying scope for regional policy interventions directed towards achieving an absolute reduction in emissions from transport, including reduced car use and a significant shift to more sustainable modes, including improved public transport services | June 2009            |                    | WMRA/Regional Transport Partnership                         |

| Action:   | Timescale   | Review  | Lead  |
|---|---|---|---|
| P6. Identify strategic sites for decentralised energy production/district heating and include a policy applying to e.g. major investment sites in RSS review  | During Phase 3  |   | AWM working with Utilities on Energy mapping & feasibility studies, supported by WMRA policy work |
| P7. Review the implications of climate change scenarios (UKCIP08) to identify likely adaptation requirements, including potential vulnerabilities and opportunities, for all policy areas, including biodiversity, land management, water resources, flood-plain management, health, migration, economy, culture, buildings and infrastructure, and emergency planning, to inform future policy developments and strategy reviews | 2008 – dependent on timing of publication for UKCIP08 scenarios | In line with developments in scientific understanding/evidence base | SWM with WMRA/Policy Partnerships/ lead organisation for Regional Strategies as appropriate       |



**Economy:** Facilitate the transition to a low-carbon economy by promoting energy efficiency and low-carbon energy generation, increasing take-up of low-carbon technologies, removing barriers to new technology investment, supporting the development of environmental technology and low-carbon business sectors, and enabling businesses to prepare for the opportunities and risks of a changing climate\*.

| <b>Action:</b>   | <b>Timescale</b>                | <b>Review</b>       | <b>Lead</b>   |
|--|---------------------------------|---------------------|---|
| E1. Ensure that revisions to Regional economic policy effectively address the need to reduce emissions and adapt to unavoidable climate change impacts over the coming decades, building on current assessment work to date, and further strengthening benchmarking work   | Economic Strategy December 2007 | As IRS is developed | AWM   |
| E2. Help regional businesses improve resource efficiency (energy, transport, waste and water) and realise opportunities to diversify into low-carbon products and services, by integrating specialist advice and support with mainstream business support; develop a programme of targeted support for key sectors for growth and diversification into these markets, and for at-risk sectors to make the transition required  | End 2009                        | 2010                | AWM, Enterprise Board, Innovation Technology Council, WMBC, plus business sector partners |
| E3. Move the region towards greater energy efficiency and security, by supporting and encouraging decentralised and sustainable production, lower energy demand through greater energy efficiency, waste minimisation and reprocessing opportunities   | End 2009                        | 2010                | AWM with partners   |
| E4. Through better information and awareness raising activities, changes in working culture, new approaches to procurement and improvements in technology, encourage new and creative working practices and lifestyle changes which shift the region towards more sustainable patterns of consumption and stimulate demand for low-carbon housing, transport and consumer products; encouraging local markets and local sourcing to support regional supply chains and minimise carbon footprint | End 2009                        | 2010                | AWM with partners, public sector procurement  |
| E5. Help businesses identify and realise the opportunities and manage the risks of the changing climate for their markets, products, premises, people and logistics  | End 2009                        | 2010                | AWM with partners   |

\*The newly reviewed West Midlands Economic Strategy seeks to establish the West Midlands as a low-carbon economy in order to respond to the challenges and issues of climate change. The Economic Strategy sets the broad strategic response to these issues in terms of the Region's economy, and the accompanying delivery framework sets key actions to implement the strategy. The Climate Change Action Plan cannot be seen as separate to this, nor can it promote different or potentially contradictory economic actions. However, it has a role in focusing economic work on climate change, ensuring that the key evidence is gathered to test, review and refresh objectives, policies and actions to achieve reductions in carbon emissions and prepare the region for climate impacts.



**Implementation:** Ensure the delivery of substantial carbon reductions and climate change adaptation measures by removing barriers and providing appropriate support and incentives for regional, sub-regional and local delivery agents.

| <b>Action:</b>  | <b>Timescale</b>                 | <b>Review</b> | <b>Lead</b>  |
|---|----------------------------------|---------------|--|
| I1. Review all policy areas to identify the likely impacts of regional policy on achieving national and international targets for reducing greenhouse gas emissions and ensuring the region is prepared for likely climate change impacts, in order to identify and implement solutions for policy gaps, conflicts and barriers | Summer 2008                      | 2010          | Climate Change Panel with policy lead agencies                 |
| I2. Identify barriers faced by delivery agents including local authorities and Local Strategic Partnerships in delivering climate change mitigation and adaptation action locally and sub-regionally, in order to identify measures to address barriers and provide appropriate regional support                                | Autumn 2008                      | 2010          | Climate Change Panel with LGA Climate Change Commission/ WMCoE |
| I3. Identify regional skills needs related to climate change adaptation and mitigation objectives (e.g. land management, design, technology, renewable/sustainable energy etc.) to inform regional skills priorities  | March 2009                       |               | Regional Skills Partnership                                    |
| I4. Identify existing and potential funding streams and establish a regional approach to directing these towards agreed priorities  | End 2007                         | Mid 2008      | Climate Change Panel   |
| I5. Low-carbon credentials to form part of selection criteria within sustainable procurement practices  | End 2007 agree minimum standards | Ongoing       | WMCoE/Partners   |
| I6. Investigate feasibility for a Regional resource-efficiency (energy, waste and water) reinvestment fund  | Feasibility study end 2007       | 2010          | AWM  |

**Leadership:** Ensure that regional partners lead by example by significantly reducing carbon emissions from their own premises, activities and services and by ensuring that their assets and services are resilient to likely climate change impacts.

| Action:  | Timescale | Review  | Lead               |
|--|-----------|---|--------------------|
| L1. Review own practices to identify and implement potential carbon reductions and appropriate adaptation measures (e.g. procurement, energy and water use in own buildings, fleet, staff travel to and for work, and in operations and service provision); quantify options and set targets for reductions; using Environmental Management Systems where appropriate; report publicly on progress | June 2008 | Annual monitoring by individual partners  | All partners       |
| L2. Establish and support a regional Climate Change Panel to oversee delivery of the Climate Change Action Plan, to review priorities taking into account gaps, conflicts and synergies in existing regional activity, to identify and learn from best practice within and outside the West Midlands, and to lobby and influence at national, sub-regional and local level where appropriate       | End 2007  | Biannual reports to Regional Minister<br><br>Annual Review to Regional Assembly | GOWM with partners |

**Communication:** Increase awareness and understanding of the implications of Climate Change and appropriate mitigation and adaptation actions for the West Midlands amongst regional policy-makers, public sector organisations and businesses.

| Action:  | Timescale   | Review      | Lead                           |
|--|-------------|-------------|--------------------------------|
| C1. Identify sectoral Climate Change Champions to lead by personal example and promote awareness and delivery of the Regional Climate Change Action Plan, building on low-carbon WMES work on carbon influencers register  | End 2007    | Summer 2008 | Climate Change Panel           |
| C2. Develop and implement a communication and capacity-building programme with a tailored approach for specific audiences, targeting sectors with the biggest potential impact, building on low-carbon WMES work on communications strategy                        | Spring 2008 | End 2008    | Climate Change Panel           |
| C3. Provide a forum/network for peer support (e.g. business to business, public sector to public sector) identifying and promoting good practice in reducing emissions and adapting to climate change impacts, building on existing network and forum arrangements | Ongoing     | 2009        | Climate Change Panel           |
| C4. Encourage and support Local Authorities in the West Midlands that have not already done so to sign the Nottingham Declaration or locally-specific sustainability declaration and to develop and implement action plans to support it                           | Immediate   | Biannual    | WMLGA/WMRA/ Environment Agency |
| C5. Promote sustainable and renewable energy as a strong economic driver determining competitiveness, energy security, business continuity etc.  | Immediate   | Ongoing     | AWM                            |

**Targets and monitoring:** Where there are gaps in national monitoring or where Regional accountability is required for progress, establish appropriate regional carbon reduction targets and adaptation goals, and a robust and transparent framework for monitoring and reviewing progress.

| <b>Action:</b>   | <b>Timescale</b>   | <b>Review</b>   | <b>Lead</b>  |
|--|--|---|--|
| TM1. Review existing regional targets for carbon reductions, achievement of energy efficiency, and for the uptake of renewable energy as expressed in the West Midlands Regional Energy Strategy   | Spring 2008  | In line with developments in scientific understanding/evidence base | Regional Energy Office (arrangements to be agreed)/ Climate Change Panel                             |
| TM2. Investigate feasibility of developing rolling five-year regional carbon budgets in line with the Climate Change Bill, or some alternative mechanism for milestones  | Autumn 2008  |   | Regional Energy Office (arrangements to be agreed)/ Climate Change Panel                             |
| TM3. Identify regionally-appropriate performance indicators and goals for regional adaptation activity and resilience to climate impacts   | Autumn 2008  | In line with developments in scientific understanding/evidence base | Environment Agency/Natural England/SWM Impacts and Adaptation Partnership/ Climate Change Panel/WMRO |
| TM4. Establish an agreed baseline for regionally-appropriate key performance indicators against which to benchmark regional progress towards reduced emissions and adaptation/resilience to likely climate impacts; identify and implement mechanism for future monitoring, building on low-carbon WMES research | Data gaps to be identified in SoRR 2007. Proposals and timescales for filling gaps to follow |   | WMRO/Regional Energy Office (arrangements to be agreed)/ Climate Change Panel                        |
| TM5. Climate change targets to be incorporated and reflected in all regional policy; climate change impact assessments to be completed for all new regional policy development   | As regional strategies are reviewed  | Ongoing   | Regional strategy/ policy owners   |

## 7 The Regional Climate Change Panel

In order to ensure effective delivery, monitoring and review of the Climate Change Action Plan, a Regional Climate Change Panel will be established.

The Panel will oversee the delivery of the Climate Change Action Plan and ensure the contribution of all policy areas to reducing greenhouse gas emissions and adapting to the impacts of unavoidable climate change. The Panel will include the Chief Executives of Advantage West Midlands, the West Midlands Regional Assembly and West Midlands Local Government Association, the Regional Director of Government Office for the West Midlands, and Directors from the Environment Agency and Natural England, and will be accountable to the Regional Minister for the West Midlands. The Secretariat for the Panel will be provided by Government Office for the West Midlands.

The Panel will be supported by an officer Management Group with devolved responsibility for developing and managing delivery of the detailed work programme for the Action Plan. Membership of this group will be drawn from key partners with the aim of involving individuals with relevant expertise and organisations with appropriate influence and resources.

It is intended that these arrangements should be reasonably robust in the face of the proposed changes to regional working arrangements set out in the Review of Sub-National Economic Development and Regeneration.

The Action Plan will be a dynamic resource rather than remain a static document. Progress against the Action Plan will be regularly reviewed by the Climate Change Panel, with the outputs of early actions and progress against targets informing the development of an ongoing programme of further actions. Future iterations of the Action Plan will be reported to the Regional Assembly for information and made publicly available via the Assembly's website.

In order to evaluate the Region's progress against the fundamental objectives of reducing emissions and adapting to likely impacts of climate change, West Midlands Regional Observatory will report on climate change indicators in their State of the Region Report and as part of their work on monitoring the West Midlands Economic Strategy and Regional Spatial Strategy.

## Appendix 1:

### Regional Bodies delivering and supporting the Climate Change Action Plan

#### Advantage West Midlands

The Regional Development Agency for the West Midlands, Advantage West Midlands is charged with economic and physical regeneration, the promotion of employment, business efficiency, investment and competitiveness, the development and application of skills and making a contribution towards sustainable development. Within the new Energy White paper it has also been given responsibility to lead regionally on energy issues.

Advantage West Midlands is responsible for drawing up the West Midlands Economic Strategy and the Agenda for Action plan on behalf of the Region, which provides the basis for the delivery of a wide range of initiatives and programmes by Advantage West Midlands and its partners. It is the responsible body for West Midlands Business Link, the Innovation and Technology Council, Science City, EnergyWM, and the redevelopment of a large range of brownfield land. AWM also hosts the regional managers of Carbon Trust, Envirowise, WRAP, and supports the West Midlands Climate Change Adaptation Coordinator.

Advantage West Midlands is formally accountable to central government but is also subject to Scrutiny within the Region by the Assembly.

*Website: [www.advantagewm.co.uk](http://www.advantagewm.co.uk)*

#### Culture West Midlands

Culture West Midlands (CWM) is one of eight Regional Cultural Consortia set up by the Department for Culture, Media and Sport (DCMS) to represent the arts, sports, heritage, tourism and creativity in the English regions. CWM works to promote all aspects of the cultural life of the region with partners across the public, private and voluntary sectors. Culture is a major contributor to economic prosperity and social development; and also has a vital role to play in encouraging community cohesion; attracting and retaining a skilled workforce; creating appealing and exciting places to live; and unlocking individual potential through new ways of learning, discovery and expression. Culture West Midlands aims to be the collective voice for the West Midlands cultural sector and to promote collaborative working in order to enhance the region's cultural offer and its contribution to quality of life.

*Website: [www.culturewm.org.uk](http://www.culturewm.org.uk)*

## **Government Office for the West Midlands**

Government Offices in the Regions work on behalf of ten government departments to: drive the implementation of government policies and programmes in the Region; provide performance and policy feedback about their implementation; lead for the government in negotiating with local areas on Local Area Agreements and 'place-specific' policies; and support the development of regional strategies. The Government Offices represent government in a joined-up way, and support regional and local partnership in developing cross-cutting solutions to issues. Government Offices also provide a single point of contact within a region on a departmental policy or programme.

GOWM works to ensure that Government policy on climate change is addressed through Regional Strategies (such as the Regional Spatial Strategy and Regional Economic Strategy), Local Development Frameworks and other public sector delivery mechanisms such as local area agreements. It also seeks to deliver the climate change agenda by working in partnership to encourage the development of appropriate regional institutions and influencing the development of initiatives and programmes.

*Website: [www.go-wm.gov.uk](http://www.go-wm.gov.uk)*

## **Carbon Trust**

The Carbon Trust works with business and the public sector helping them to reduce their carbon emissions. It also supports the development of a UK-based industry sector to capture the economic benefits of low-carbon technologies. The Carbon Trust has three areas of activity. To reduce carbon emissions it promotes and advises on the use of existing technologies to reduce carbon emissions through improved energy efficiency and the broader strategic issues of carbon management. The Trust also provides financial incentive schemes to help invest in the necessary technology. To develop low-carbon technologies the Carbon Trust identifies, invests in and supports the development of innovative, energy efficient and low-carbon technologies across all sectors. To respond to climate change it encourages changes in attitudes, behaviour and business processes by informing business, government and investors on how they can most effectively respond to climate change.

*Website: [www.carbontrust.co.uk](http://www.carbontrust.co.uk)*

## **Energy Saving Trust**

The Energy Saving Trust (EST) promotes the use of cleaner fuels for transport, better insulation and heating efficiency for buildings and homes, and champions small-scale renewable energy, such as solar and wind power. The EST provides independent information, advice and evidence-based policy analysis on energy efficiency and small-scale renewable technologies; develops and manages advice and support programmes on behalf of UK Government; and delivers marketing campaigns, most notably for home energy efficiency. The EST works closely with local authorities through the practical help advice service.

*Website: [www.energysavingtrust.org.uk](http://www.energysavingtrust.org.uk)*

## Energy West Midlands

Energy West Midlands is the Regional Energy Office, set up to deliver the West Midlands Regional Energy Strategy, published in December 2004. The Regional Energy Strategy was developed by GOWM, AWM, and WMRA, with WMRA being the accountable body. It primarily focuses on the mitigation of climate change through reducing carbon emissions, security of energy supply and the business opportunities arising from climate change for West Midlands companies. Central government funding for the Regional Energy Office ceased in June 2007 and succession arrangements are currently being made by Advantage West Midlands in light of the Energy White Paper.

## Environment Agency

The Environment Agency is the leading public body protecting and improving the environment in England and Wales. As the greatest environmental threat we face, climate change is the highest priority for the Agency. In the Midlands region the Environment Agency has a major role in limiting both the scale of climate change, by addressing its causes, and its impact, by adapting to climate change.

The Environment Agency regulates industry and waste sites responsible for about 40% of UK emissions of greenhouse gases. The Agency is also the competent Authority for the EU Emissions Trading Scheme in England and Wales. It is the lead player in addressing the impacts of climate change including increased flood risk, additional stress on water resources for people and the environment and threats to plants and wildlife. The Environment Agency is actively researching the effects of climate change and how best to respond to them.

*Website: [www.environment-agency.gov.uk](http://www.environment-agency.gov.uk)*

## Natural England

Natural England is responsible for ensuring that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development. Natural England also has responsibility to help people enjoy, understand and access the natural environment.

Natural England has a direct interest in working with regional partners to ensure that regional policy reflects Government's environmental policies, particularly those set out in "Securing the Future", the UK Sustainable Development Strategy. Dealing with climate change mitigation and adaptation is fundamental to achieving this sustainability. In the West Midlands, Natural England is playing a lead role in piloting a review of future impacts of climate change on natural assets, to inform future work on climate change adaptation.

*Website: [www.naturalengland.org.uk](http://www.naturalengland.org.uk)*

## RegenWM

RegenWM is the West Midlands Centre of Excellence for Regeneration. RegenWM's brief is to ensure that those involved in developing and delivering the multi-million pound regeneration activity in the Region have the right skills, knowledge and access to information to enable effective and sustainable regeneration across the West Midlands. RegenWM acts as a catalyst within the regeneration community to ensure dissemination and implementation of best practice. Its work encompasses both urban and rural regeneration, links closely with the Government's Neighbourhood Renewal "Skills and Knowledge" agenda and is closely aligned with the Academy for Sustainable Communities, the body established by the ODPM to promote sustainable communities skills nationally.

*Website: [www.regenwm.org](http://www.regenwm.org)*



## Regional Board

The Regional Board is convened by Government Office and consists of representatives of the government departments and non-departmental public bodies operating in the West Midlands Region. The group provides a channel for communication between these agencies and the Region and for ensuring strategic coherence in regional working. The terms of reference of the Regional Board are to contribute to the development of a transparent, integrated and sustainable approach to regional policy and to ensure a consistent approach across the membership organisations; working with the Assembly, Advantage West Midlands, and other major regional stakeholders to identify the key strategic regional policy objectives that are likely to be the focus of co-operative action; to identify ways in which regional footprint organisations can contribute towards the development and achievement of key strategic objectives; to identify and resolve any inconsistencies and duplication in regional strategies; and to develop effective ways of communicating key strategic objectives with footprint organisations, the Assembly and the wider regional community.

## Regional Environment Partnership

The Regional Environment Partnership holds the lead responsibility for environment on behalf of the West Midlands Regional Assembly. It seeks to integrate environmental sustainability across all Assembly strategies, plans and initiatives and contribute to the implementation of sustainable development in the Region. This includes advising on the development and delivery of the quality of the environment aspects of the Regional Spatial Strategy, including waste, minerals and energy.

*Website: [www.wmra.gov.uk/page.asp?id=80](http://www.wmra.gov.uk/page.asp?id=80)*

## Regional Equalities and Diversity Partnership

The Regional Equality and Diversity Partnership leads on Equality and Diversity and Social Inclusion policy issues within the Region and is responsible for advising the West Midlands Regional Assembly on these matters. The Partnership was formed in line with the recommendations of the 2005 Strategic Review of Equalities and Diversity in the Region. Its purpose is to integrate equalities and diversity issues within the regional agenda. It works with other regional partnerships and stakeholders to highlight equality and diversity issues and to ensure that the needs of all groups within the Region are considered.

*Website:*

*[www.wmra.gov.uk/page.asp?id=202](http://www.wmra.gov.uk/page.asp?id=202)*

## Regional European and International Affairs Partnership

The European and International Affairs Partnership (Chair: Sir Albert Bore) is made up of representatives from the Assembly with expertise in European and International policy issues. The purpose of the group is to provide the West Midlands with the means for agreeing a single, coherent cross sector voice on European policy issues of importance within the region. It also provides wider policy context for the work of regional partners and the West Midlands in Europe office in Brussels. The Partnership sets out the region's European agenda and priorities.

*Website: [www.wmra.gov.uk/page.asp?id=19](http://www.wmra.gov.uk/page.asp?id=19)*

### **Regional Health Partnership**

The Regional Health Partnership has a membership of public, private and voluntary sector representatives. The core functions of the Partnership include focusing on reducing health inequalities in the broadest sense, identifying, measuring and making recommendations in regional policy development, supporting regional research and best evidence policy making and disseminating good models of practice.

*Website: [www.wmra.gov.uk/page.asp?id=34](http://www.wmra.gov.uk/page.asp?id=34)*

### **Regional Housing Advisory Forum**

The Regional Housing Advisory Forum was formally launched in September 2006 and functions as an Officer group supporting the activities of the Regional Housing Executive. The Forum includes representatives from local authorities, key regional agencies, the business sector and other stakeholder groups.

*Website: [www.wmra.gov.uk/page.asp?id=13](http://www.wmra.gov.uk/page.asp?id=13)*

### **Regional Housing Executive**

Following the transfer of the Regional Housing Board from Government Office for the West Midlands to the Assembly, a new Board, known as the Regional Housing Executive, was launched in September 2006. The key responsibilities of the Regional Housing Executive are to prepare, consult on, publish, and keep up-to-date the Regional Housing Strategy; monitor delivery of the Strategy; support and encourage partnership working, particularly partnerships based around sub-regional housing markets; and to advise Ministers on how the Regional Housing Pot should be targeted and priority groups to be helped into home ownership.

*Website: [www.wmra.gov.uk/page.asp?id=13](http://www.wmra.gov.uk/page.asp?id=13)*

### **Regional Planning Partnership**

The Regional Planning Partnership carries out the Regional Planning Body (RPB) function on behalf of the Regional Assembly, leading on the development and delivery of the Regional Spatial Strategy (RSS).

*Website: [www.wmra.gov.uk/page.asp?id=46](http://www.wmra.gov.uk/page.asp?id=46)*

### **Regional Skills Partnership**

The Regional Skills Partnership leads the skills agenda in the West Midlands and acts as a catalyst for change. It aims to create a simple demand-led approach to skills that aligns supply with the needs of employers, individuals and the regional economy.

*Website: [www.wmskillspartnership.org.uk](http://www.wmskillspartnership.org.uk)*

### **Regional Transport Partnership**

The Regional Transport Partnership includes local transport authorities, the Highways Agency, the Department of Transport, Centro, the business community, Birmingham International Airport, the freight industry and bus and rail industries. The Partnership holds a policy lead responsibility for Transport in the West Midlands, supporting and advising the Regional Assembly in developing the Regional Transport Strategy (incorporated within the Regional Spatial Strategy) and Delivery Plan and aims to achieve consensus amongst partners on key regional transport issues.

*Website: [www.wmra.gov.uk/page.asp?id=67](http://www.wmra.gov.uk/page.asp?id=67)*

## **Strategic Health Authority**

The Strategic Health Authority is responsible for maintaining a strategic overview of the NHS and its needs in the area. In particular it has responsibilities to the Department of Health for ensuring that measures are in place to improve and protect the health of the population and reduce health inequalities, by having a robust public health delivery system. The Strategic Health Authority also holds PCTs to account for the effectiveness of their commissioning processes, organisations and systems. The Strategic Health Authority provides leadership for engagement of health interests in the development of strategic partnerships across the public sector (working with Government Offices of the Regions, Regional Assemblies, Skills Councils and Regional Development Agencies) to secure delivery of government policy.

*Website: [www.nhs.uk](http://www.nhs.uk)*

## **Sustainability West Midlands**

Sustainability West Midlands (SWM) is an independent partnership with members from business, community, voluntary, non-governmental and public sector organisations which represent economic, environmental and social interests. Through its members SWM acts as a champion body for sustainable development in the Region and seeks to communicate, promote and champion the principles of sustainable development and good corporate governance. SWM works with all Concordat Partners to advance individual and collective commitments to sustainable development principles and actions in all policies, programmes and projects for the Region.

Sustainability West Midlands also leads the West Midlands Climate Change Adaptation and Impacts Partnership. The Partnership aims to raise awareness and disseminate information on climate change adaptation issues for the West Midlands; influence policy at regional and sub-regional level; build adaptive capacity (in terms of skills, networks, capabilities); deliver adaptation actions; build resources to deliver objectives (e.g. funding, partners, etc.); and identify research needs on climate impacts and adaptation in the West Midlands.

*Website:*

*[www.sustainabilitywestmidlands.org.uk](http://www.sustainabilitywestmidlands.org.uk)*

## **West Midlands Biodiversity Partnership**

West Midlands Biodiversity Partnership (WMBP) is made up of representatives of organisations involved in nature conservation in the West Midlands. The Partnership aims to unite those concerned about the Region's wildlife and habitats to influence regional working. More than twenty organisations are involved in the West Midlands Biodiversity Partnership, including statutory agencies, voluntary organisations, private companies, associations and the Government Office for the West Midlands. The Partnership supports practical actions for wildlife and targets for restoration through Biodiversity Action Plans (BAPs), supports survey work, gives advice to land-owners and managers, and works with policy and decision-makers. It also provides information about the Region's wildlife and encouraging safe access to the places it lives. In 2001, the WMBP produced the West Midlands Regional Biodiversity Audit, which gathered information on species and habitats found in the West Midlands and laid out key challenges for the Region, which the Partnership is using to inform its work. The main work of the WMBP is now focused on the delivery of the Regional Biodiversity Strategy.

*Website: [www.wmbp.org](http://www.wmbp.org)*

## **West Midlands Business Council**

The Business Council is a single, Region-wide body, representing the interests of all the major business groupings, professional organisations and trade associations. It operates at a strategic level, regionally, nationally and internationally, to ensure business needs are taken on board and acted on. By working with key partners, West Midlands Business Council ensures that it maximises the value of the considerable resources and talents that exist across the business sector. It harnesses this experience providing a clear and unified voice for the Region's dynamic and diverse business base. The Business Council comprises member organisations from all sectors of regional commerce and industry. Their drive and shared commitment enables West Midlands Business Council to provide a focused response to regional issues – from transport and skills to tackling red tape.

*Website: [www.wmbusinesscouncil.org.uk](http://www.wmbusinesscouncil.org.uk)*

## **West Midlands Centre for Constructing Excellence**

The West Midlands Centre for Constructing Excellence (WMCCE) provides specialist business improvement assistance specifically to help local businesses in the construction and building technologies sectors. Eligible businesses in the West Midlands can benefit from subsidised, or in some cases fully-funded, business improvement services. The Centre supports the region's industry-led Constructing Excellence clubs and delivers the regional demonstration programme to showcase innovation and best practice. WMCCE was set up with support from Advantage West Midlands and the European Regional Development Fund, to improve the capabilities and competitiveness of the West Midlands construction industry. The Centre is supported by the University of Wolverhampton.

*Website: [www.wmcce.org](http://www.wmcce.org)*

## **West Midlands Centre of Excellence**

The Office of the Deputy Prime Minister launched the Centres of Procurement Excellence initiative in February 2004, to support Councils in delivering the National Procurement Strategy (NPS). The Strategy, produced in partnership with the Local Government Association (LGA), is designed to ensure that the £40 billion spent by Councils each year is managed efficiently, and fully accounts for best value by applying innovation, resourcefulness and prudence to all procurement activities.

There are nine Centres, one for each of the nine regions in England. The West Midlands Centre serves all 38 authorities in the region. The emphasis is very much on support for delivering the objectives of the Government's Efficiency Review, 2004.

*Website: [www.wmcoe.gov.uk](http://www.wmcoe.gov.uk)*

### **West Midlands Enterprise Board**

The West Midlands Enterprise Board is a group set up to create an enterprising culture, drive up the number of self-employed people in the West Midlands and increase the region's productivity to the national average by 2010. The board is made up almost entirely of entrepreneurs and individuals who have had hands-on experience of running a small or medium sized enterprise in the West Midlands.

### **West Midlands in Europe**

West Midlands in Europe is a partnership representing the interests of the Region in Europe. West Midlands in Europe brings together all sectors in the Region and a wealth of experience and expertise on all aspects of European activity. Partner members include Advantage West Midlands, all the Region's local authorities through the West Midlands Local Government Association, all universities in the Region, further education, the business sector, the voluntary and community sector, culture and the arts.

*Website: [www.westmidlandsineurope.org](http://www.westmidlandsineurope.org)*

### **West Midlands Faiths Forum**

The West Midlands Faiths Forum was launched in June 2003. This is an independent body aiming to provide a 'meeting place' for the voices of the diversity of faith groups that will provide a medium whereby views can be heard and gathered in a structured manner by regional bodies, including the Regional Assembly. The West Midlands Faiths Forum's key aims are to interface with regional agencies delivering government policies in the West Midlands and advise them on the impact of such agendas on faith communities; to facilitate discussion between and research among faith communities on matters of social and religious concern; to help build the capacity of faith communities to engage with policy-makers and service providers at local, sub-regional and regional levels and to act as their advocate; to encourage community cohesion both through interfaith dialogue and discussion with the wider public.

*Website: [www.wmfaithsforum.org.uk](http://www.wmfaithsforum.org.uk)*

### **West Midlands Innovation Technology Council**

The Innovation Technology Council provides a forum for the exchange of ideas between the academic and business communities in the West Midlands.

*Website: [www.design-council.org.uk/en/Directory-Listings/Organisations/The-Innovation-and-Technology-Council/](http://www.design-council.org.uk/en/Directory-Listings/Organisations/The-Innovation-and-Technology-Council/)*

## **West Midlands Learning and Skills Council**

The Learning and Skills Council is responsible for funding and planning education and training for over 16-year-olds in England. Its mission is to raise participation and attainment through high-quality education and training which puts learners first. Its vision is that, by 2010, young people and adults in England will have the knowledge and productive skills matching the best in the world. The six local Learning and Skills Councils in the West Midlands operate within a memorandum of understanding with Advantage West Midlands to co-ordinate their learning and skills activities in support of the West Midlands Regional Economic Strategy.

*Website: [www.lsc.gov.uk](http://www.lsc.gov.uk)*

## **West Midlands Local Government Association**

The Association represents all 38 local authorities in the Region, with a commitment to represent and promote the interests of the population of the West Midlands and the local authorities that serve it at a regional level. The Association also acts as the regional link to the national Local Government Association and through this, promotes a regional perspective on national issues affecting local government. The Association is formally accountable to its constituent authorities.

*Website: [www.wmlga.gov.uk](http://www.wmlga.gov.uk)*

## **West Midlands Regional Assembly**

The Assembly has statutory responsibility as the Regional Planning Body for the West Midlands. As such the Assembly produces the Regional Spatial Strategy. The Spatial Strategy sets the strategic direction for spatial planning in the region and provides the context within which local planning authorities must develop Local Development Documents. Climate change should be a key and integrating theme of the Regional Spatial Strategy and be addressed in conjunction with the economic, social and environmental concerns that together inform the overall strategy and its components. As part of its work on the Regional Spatial Strategy the Assembly is responsible for the preparation of the Regional Transport Strategy and regional policy on Waste. The Assembly also acts as the Regional Housing Board responsible for producing the Regional Housing Strategy.

The Assembly also has statutory responsibility for Scrutiny of the Regional Development Agency (Advantage West Midlands).

The Assembly's non-statutory functions include responsibility for strategic coherence in regional working, promoting the interests of the West Midlands by speaking out on important issues and events affecting the Region and speaking up for the social, environmental, cultural and economic interests of the Region. The Assembly has a membership of 100 and is made up of representatives from the Region's local authorities, business community and other interest groups including health, trade unions, environment, community and voluntary organisations etc.

*Website: [www.wmra.gov.uk](http://www.wmra.gov.uk)*

## **West Midlands Regional Observatory**

The Regional Observatory has been established to promote joined up thinking by maximising the value of regional intelligence. The Observatory's mission is to offer public agencies, private firms and voluntary and community organisations in the West Midlands improved access to well-organised information, thereby enhancing and sharing understanding in the Region and its sub-regions and improving the quality of strategy formulation, policy making and service provision.

*Website: [www.wmro.org](http://www.wmro.org)*

## **West Midlands Rural Affairs Forum**

The Rural Affairs Forum acts as a sounding board for rural practitioners and delivery agencies; reflects the needs and aspirations of rural people; provides direction, leadership and co-ordination in respect of the rural agenda; acts as a conduit for rural views and present the West Midlands perspective on the national, regional and sub-regional rural agenda. The Forum includes representation across seven sectors, bringing together rural stakeholders from the region to inform and monitor the local delivery of policy in rural areas.

*Website: [ruralnetworkwm.org.uk/wmraf/index.aspx](http://ruralnetworkwm.org.uk/wmraf/index.aspx)*

## Appendix 2:

### Glossary of terms and abbreviations

**Adaptation** – actions taken to adapt to the likely impacts of climate change. Due to a time-lag in the climate system, the changes we will observe over the next few decades will be due to past emissions – so some impacts will occur regardless of current and future activity to reduce emissions. Some examples of adaptation actions include measures to reduce vulnerability to extreme weather events, such as flood defences or improving drainage; designing buildings to be comfortable to inhabit in higher temperatures; using greenspace to provide cooling and shade; adapting agricultural activity by introducing new crops or water management strategies; creating habitat “corridors” to allow biodiversity migration. Adaptation measures can also include improving awareness and understanding of the likely impacts of climate change and building in flexibility into decision-making and planning processes in order to build adaptive capacity.

**AWM** – Advantage West Midlands (the Regional Development Agency for the West Midlands).

**Biodiversity** – the number and variety of organisms within a given region. This includes also the variability within and between species and within and between ecosystems.

**Carbon emissions** – used to refer to emissions of carbon dioxide (CO<sub>2</sub>), which is usually considered to be the “main” greenhouse gas in terms of the volume in which it is found in the atmosphere and produced by human activity. There are however a range of other greenhouse gases, some of which are considerably more potent than carbon dioxide in terms of warming potential, but which are found in much lower

concentrations in the atmosphere and emitted in lower quantities from human activity. National and international targets differ in that the Kyoto Protocol expresses targets in terms of a “basket” of six greenhouse gases, whereas UK targets are expressed in terms of reductions in emissions of carbon dioxide, on the basis that carbon dioxide emissions can be taken as a proxy indicator for levels of most greenhouse gases.

**Carbon offset** – a process by which a given unit of carbon emissions is “offset” by investment in a project, product or process that will reduce carbon emissions by the same amount in another location. Carbon offsetting is generally regarded as the final option in mitigation activity, used to “offset” residual emissions after all direct carbon reductions through reduced consumption, increased efficiency and renewable energy use that can be made, have been made. Carbon offsetting should work on the principle of “additionality” i.e. it should be demonstrable that the offsetting investment has resulted in a reduction in emissions that would not have occurred had the investment not been made.

**Climate Change Bill (Draft)** – published for consultation by the Department for the Environment, Food and Rural Affairs in March 2007, the draft Climate Change Bill sets out proposals for a long-term framework for the UK to achieve its goals of reducing carbon dioxide emissions and ensure steps are taken towards adapting to the impacts of climate change. See [www.defra.gov.uk/corporate/consult/climatechange-bill/](http://www.defra.gov.uk/corporate/consult/climatechange-bill/).



**Climate Change scenarios** – The UKCIP02 climate change scenarios (published in April 2002) present four different descriptions of how climate may change, based on four different scenarios for how future emissions may change. An exercise to update these scenarios is currently ongoing, with updated scenarios expected in 2008 (UKCIP08). UKCIP08 will provide a more ‘probabilistic’ model of the plausible limits of change in comparison with UKCIP02 which provides a range of possible outcomes without attempting to assign a degree of likelihood of occurring to each. See [www.ukcip.org.uk](http://www.ukcip.org.uk).

**Counting Consumption: CO<sub>2</sub> emissions, material flows and Ecological Footprint of the UK by region and devolved country** – published by WWFUK in 2006 as part of Ecological Budget UK, a Biffaward-funded project designed to build capacity within the policy community forming part of the wider BIFFAWARD mass balance programme to map the environmental impacts of resource consumption and resource flows throughout the UK. See [www.wwflearning.org.uk/ecological-budget/](http://www.wwflearning.org.uk/ecological-budget/).

**Decentralised energy** – the production of energy close to the point of consumption rather than energy that is produced centrally and distributed via the National Grid.

**District heating** – the supply of heat from a central source for a group of buildings within an area. District heating is often more efficient than heating buildings separately particularly where one or more buildings house a process or activity that generates “waste” heat, although this is not a pre-requisite. District heating is often appropriate for new developments particularly at higher densities although it can be applied retrospectively in some circumstances.

**Energy White Paper** – published by the Department for Trade and Industry in May 2007. The Energy White Paper sets out the Government’s international and domestic energy strategy to address long term energy challenges and deliver four energy policy goals: to put ourselves on a path to cutting CO<sub>2</sub> emissions by some 60% by about 2050, with real progress by 2020; to maintain the reliability of energy supplies; to promote competitive markets in the UK and beyond; and to ensure that every home is adequately and affordably heated. See [www.berr.gov.uk/energy/whitepaper/page39534.html](http://www.berr.gov.uk/energy/whitepaper/page39534.html).

**Environmental Management Systems** – Environmental management systems can be used by organisations in both the private and public sectors to help them reduce their environmental impacts, comply with relevant legislation, and demonstrate that they are managing their environmental risks and liabilities responsibly. See [www.defra.gov.uk/environment/business/scp/actions/ems.htm](http://www.defra.gov.uk/environment/business/scp/actions/ems.htm).

**GOWM** – Government Office for the West Midlands.

**Greenhouse gas emissions** – greenhouse gases are so called because their presence in the earth’s atmosphere traps heat energy from the sun, resulting in a warming effect like that in a greenhouse. It is this “greenhouse effect” that maintains the Earth’s temperature at a level that supports life. However, increasing concentrations of greenhouse gases in the earth’s atmosphere are having a warming effect, leading to climate change. Greenhouse gases include water vapour, carbon dioxide, methane, ozone, nitrous oxide, hydrofluorocarbons, perfluorocarbons and chlorofluorocarbons. National and international targets differ in that the Kyoto Protocol expresses targets in terms of a “basket” of six greenhouse gases (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulphur hexafluoride), whereas UK targets are expressed in terms of reductions in emissions of carbon dioxide only, on the basis that carbon dioxide emissions can be taken as a proxy indicator for levels of most greenhouse gases.

**Integrated Regional Strategy** – The Review of Sub-National Economic Development and Regeneration, also known as the Sub-National Review (SNR), was published in July 2007 and set out a number of reforms at local, sub-regional and regional levels. The SNR announced that the regional tier will be streamlined leading to an increased strategic role for Regional Development Agencies, which will be responsible for developing integrated Regional Strategies, promoting sustainable economic development through working with local authorities and other partners.

**Kyoto Protocol** – The Kyoto Protocol to the United Nations Framework Convention on Climate Change is an amendment to the international treaty on climate change, assigning mandatory emission limitations for the reduction of greenhouse gas emissions to the signatory nations. The objective of the protocol is to stabilise greenhouse gas concentrations in the atmosphere at a level that avoids dangerous climate change. See [www.unfccc.int/kyoto\\_protocol/background/items/2878.php](http://www.unfccc.int/kyoto_protocol/background/items/2878.php).

**LGA Climate Change Commission** – established to consider how local government can respond more effectively to both reduce greenhouse gas emissions and deal with the impact of climate change. The commission will look at the ways in which councils can tackle carbon emissions in their own buildings and facilities, in the services they provide and decisions they take in housing, transport and social services. See [www.campaigns.lga.gov.uk/climatechange/home/](http://www.campaigns.lga.gov.uk/climatechange/home/).

**Mitigation** – actions taken to reduce emissions of greenhouse gases into the earth’s atmosphere either by controlling emissions at source or by capturing and storing emissions (sequestration).

**Nottingham Declaration on Climate Change** – a voluntary pledge by local authorities, originally launched in October 2000 at a conference in Nottingham, to address the issues of climate change. It represents a high-level, broad statement of commitment that any council can make to its own community. See [www.nottinghamdeclaration.org.uk](http://www.nottinghamdeclaration.org.uk).

**Regional Concordat** – provides a framework for partnership working between regional organisations and for the integration of regional strategies. It is an agreement that reflects partners’ respective roles and shared responsibilities, including the co-ordination and integration of regional strategies. See [www.wmra.gov.uk/page.asp?id=9](http://www.wmra.gov.uk/page.asp?id=9).

**Regional Development Agency** – a non-departmental public body established for the purpose of economic development in the regions. Each of the eight English Regions, plus London, has its own Regional Development Agency. Advantage West Midlands is the Regional Development Agency for the West Midlands.

**Regional Minister** – Regional Ministers are responsible for providing a clear sense of strategic direction for their region and will give the general public a voice in central government, ensuring that government policy takes account of the differing needs of the nine English regions. The functions that Regional Ministers will undertake are mostly around the responsibilities of the Government Offices and the Regional Development Agencies (RDAs), particularly in relation to economic development. Regional Ministers will be able to take questions in Parliament on the work of regional bodies and on regional strategies. Regional Ministers will be a visible representative of their area; they will take a key role in bringing together local services and different arms of government at important times for the region. The role of Regional Ministers is to advise the Secretary of State for Business, Enterprise and Regulatory Reform on the approval of regional strategies and appointment of RDA Chairs and Boards; represent regional interests in the formulation of central government policy relevant to economic growth and sustainable development in areas that have not been devolved to the

RDAs; facilitate a joined up approach across government departments and agencies to enable the effective delivery of the single regional strategy; champion the region at high level events and with regard to high profile projects (including through a programme of regional visits); and represent the Government with regard to central government policy at regional select committee hearings and at parliamentary debates focused specifically on the region.

**Review of Sub-National Economic Development and Regeneration** – published by HM Treasury in July 2007 and also known as the Sub-National Review. The Review set out a number of reforms at local, sub-regional and regional levels aimed at reducing disparities between regions in economic performance. The SNR announced that the regional tier will be streamlined leading to an increased strategic role for Regional Development Agencies, which will be responsible for developing integrated Regional Strategies, promoting sustainable economic development through working with local authorities and other partners. Regional Assemblies will be phased out from 2010. See [www.hm-treasury.gov.uk/media/9/5/subnational\\_econ\\_review170707.pdf](http://www.hm-treasury.gov.uk/media/9/5/subnational_econ_review170707.pdf).

**RSS** – West Midlands Regional Spatial Strategy, produced by West Midlands Regional Assembly.

**Scrutiny and Strategic Review** – The Regional Assembly has a responsibility for scrutinising Advantage West Midlands within the framework of the Regional Economic Strategy. In addition it has been recognised that the Assembly is in an ideal position to examine wider issues of regional importance. These strategic reviews are carried out within the framework of the Regional Concordat and examine how regional bodies are working collectively to address key issues for the region. See [www.wmra.gov.uk/page.asp?id=10](http://www.wmra.gov.uk/page.asp?id=10).

**Securing the Future: Delivering Sustainable Development Strategy** – launched in March 2005 by the Department for the Environment, Food and Rural Affairs, the strategy sets principles for sustainable development, characterised by a strong, healthy and just society, living within environmental limits, which is supported by a sustainable economy, good governance, and the responsible use of sound science. It also sets four priorities for sustainable development: sustainable consumption and production; climate change and energy; natural resource protection and environmental enhancement; and sustainable communities. See [www.sustainable-development.gov.uk/publications/uk-strategy/index.htm](http://www.sustainable-development.gov.uk/publications/uk-strategy/index.htm).

**SoRR** – State of the Region Report, produced by West Midlands Regional Observatory.

**State of the Region Report** – produced by West Midlands Regional Observatory on a four-yearly cycle, with annual updates. The Report aims to examine the key challenges facing the West Midlands and offer an issued account of both the current situation and progress that has been made. The report recognises that no single issue exists in isolation and seeks to consider the inter-relationships between them, identifying underlying processes that need to be addressed. See [www.wmro.org/standardTemplate.aspx/Home/GeneralResearch/StateoftheRegionReport2004](http://www.wmro.org/standardTemplate.aspx/Home/GeneralResearch/StateoftheRegionReport2004).

**Stern Review of the Economics of Climate Change** – an independent Review commissioned by the Chancellor of the Exchequer, reporting to the Chancellor and Prime Minister, as a contribution to assessing the evidence and building understanding of the economics of climate change. The Review reported that the benefits of strong, early action on climate change outweigh the costs. See [www.hm-treasury.gov.uk/Independent\\_Reviews/stern\\_review\\_economics\\_climate\\_change/sternreview\\_index.cfm](http://www.hm-treasury.gov.uk/Independent_Reviews/stern_review_economics_climate_change/sternreview_index.cfm).

**Sustainable Housing Action Project** – a programme of work aiming to promote housing energy efficiency best practice across the West Midlands, funded by the Energy Saving Trust and carried out on behalf of the Regional Assembly and Energy West Midlands by Sustainability West Midlands. See [www.sustainabilitywestmidlands.org.uk/shap](http://www.sustainabilitywestmidlands.org.uk/shap).

**SWM** – Sustainability West Midlands.

**West Midlands** – the administrative region incorporating Shropshire, Staffordshire, Herefordshire, Worcestershire, Warwickshire and the West Midlands conurbation.

**West Midlands Economic Strategy** – sets out what the West Midlands region needs to do to improve its economic performance, by both building on the region’s strengths and addressing market failures. The Strategy sets out the agreed actions needed for the region to be recognised as world class by 2010. See [www.advantagewm.co.uk](http://www.advantagewm.co.uk).

**West Midlands Regional Energy Strategy** – sets out how the region can contribute towards the development of renewable energy and greater take up of energy efficiency. See [www.energywm.org.uk/page.asp?id=4](http://www.energywm.org.uk/page.asp?id=4).

**West Midlands Regional Spatial Strategy** – produced by West Midlands Regional Assembly. The Regional Spatial Strategy is part of the national planning system. Its main purpose is to provide a long term land use and transport planning framework for the Region, guiding the preparation of local authority development plans and local transport plans. The Spatial Strategy determines (amongst other things) the scale and distribution of housing and economic development across the Region, investment priorities for transport and sets out policies for enhancing the environment. It also incorporates the Regional Transport Strategy. See [www.wmra.gov.uk/page.asp?id=49](http://www.wmra.gov.uk/page.asp?id=49).

**West Midlands Sustainability Checklist for Developments** – brings together economic, social and environmental sustainability issues and requirements for new developments. The checklist defines minimum requirements as set out in national and regional policy and guidance and identifies good and best practice. It is intended for use by developers and planners to assess to what extent a development site proposal will deliver on the different aspects of sustainability. See [www.checklistwestmidlands.co.uk](http://www.checklistwestmidlands.co.uk).

**WMBC** – West Midlands Business Council.

**WMCCE** – West Midlands Centre for Constructing Excellence.

**WMCoE** – West Midlands Centre of Excellence.

**WMES** – West Midlands Economic Strategy.

**WMLGA** – West Midlands Local Government Association.

**WMRA** – West Midlands Regional Assembly.

**WMRO** – West Midlands Regional Observatory.

**UKCIP (UK Climate Impacts Programme)**

– provides climate change scenarios that show how the climate might change and co-ordinates research on dealing with our future climate. UKCIP shares this information, free of charge, with organisations in the commercial and public sectors to help them prepare for the impacts of climate change. UKCIP is funded by the Department for Environment, Food & Rural Affairs (Defra) and based at the University of Oxford. See [www.ukcip.org.uk](http://www.ukcip.org.uk).

## Appendix 3: Acknowledgements

West Midlands Regional Assembly would like to acknowledge the valuable support and input for the development of this Climate Change Action Plan received from the following organisations and individuals.

- Advantage West Midlands
- Beryl Metcalf
- Birmingham International Airport
- Black Country Consortium
- Bridgnorth District Council
- Campaign for the Protection of Rural England
- Carbon Trust
- Centro – WMPTA
- ConstructionSkills
- Coventry Diocesan Environment Group
- Culture West Midlands
- Diocese of Worcester
- Energy Saving Trust
- Energy West Midlands
- Environment Agency
- Forestry Commission
- Friends of the Earth
- Geoff Perrott (Herefordshire Council)
- Government Office for the West Midlands
- Guru Nanak Nishkam Sewak Jatha (Birmingham)
- Hestia Managed Services Ltd
- Highways Agency
- Institution of Civil Engineers
- Jobcentre Plus
- Karen Davies (Stafford Borough Council)
- Learning and Skills Council
- Malvern Hills District Council
- Marches Energy Agency
- National Farmers Union
- National Forest
- Natural England
- Nuneaton and Bedworth Borough Council
- Regional Environment Partnership
- Regional Health Partnership
- Regional Sustainable Development Officers Network
- Rugby Borough Council
- Sandwell Metropolitan Borough Council
- Shropshire County Council
- Solihull Metropolitan Borough Council
- Staffordshire County Council
- Sustainability West Midlands
- SWM Climate Change Impacts and Adaptation Partnership
- TUC Midland Region
- Walsall Council
- Warwickshire County Council
- West Midlands Biodiversity Partnership
- West Midlands Business Council
- West Midlands Centre for Constructing Excellence
- West Midlands in Europe
- West Midlands Faiths Forum
- West Midlands Regional Assembly
- West Midlands Regional Observatory
- West Midlands Regional Rural Affairs Forum
- West Midlands Wildlife Trusts
- Woodland Trust
- WWF-UK
- Wychavon District Council



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