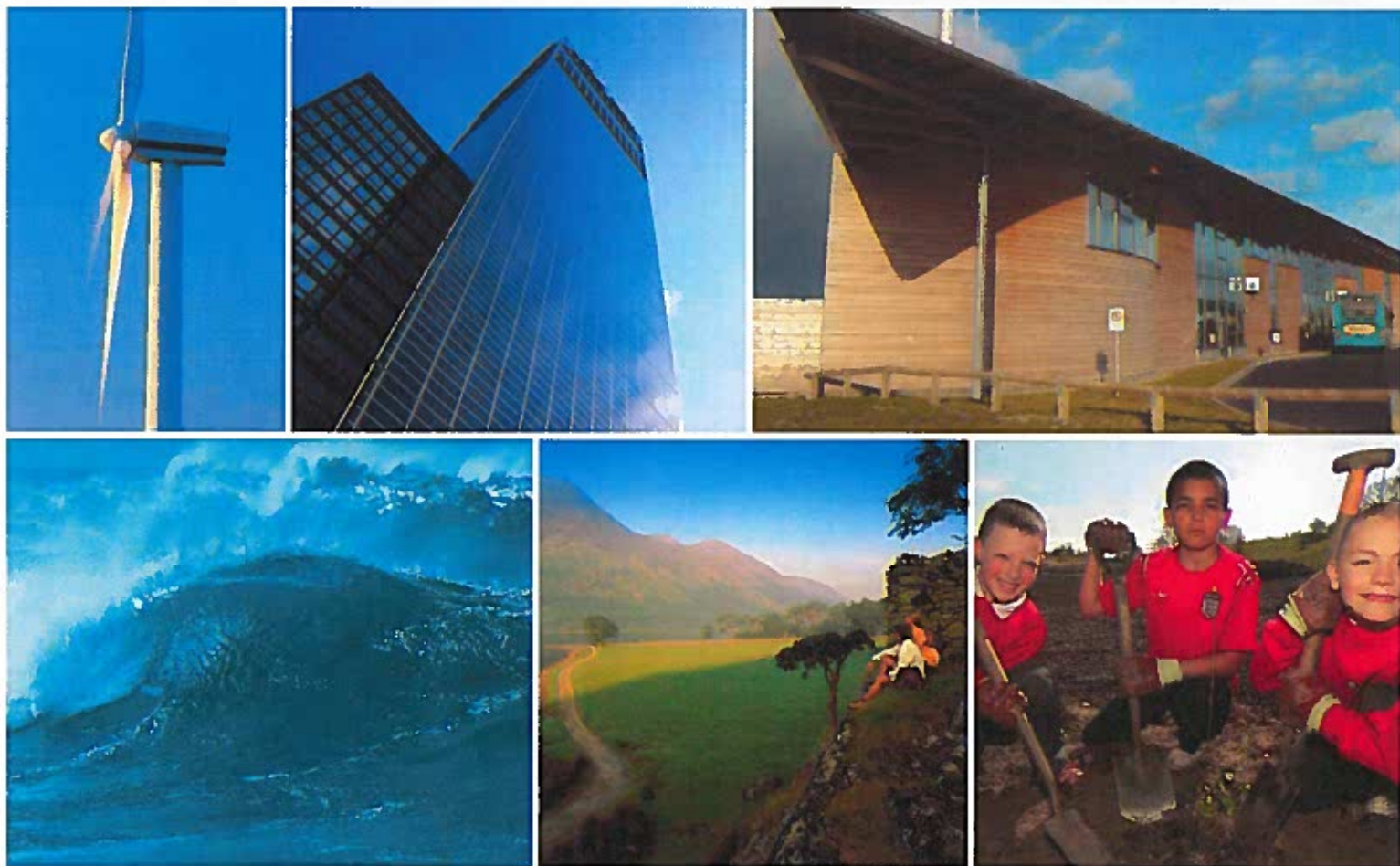


RD3

Rising to the Challenge

A Climate Change Action Plan for England's Northwest 2007-09



INVESTING IN
englandsnorthwest

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Foreword

It should come as little surprise that our region wishes to take a lead on climate change and energy. England's Northwest led the industrial revolution and through innovation, resourcefulness and - yes - significant quantities of fossil fuel, it defined the very shape of modern society.

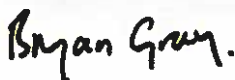
In many ways the 'white heat' of that revolution burns as strongly today as it ever did, and leaves us with a pivotal challenge: to tackle climate change whilst delivering a better quality of life, increased levels of prosperity and a better environment. It is a challenge we are not afraid to confront and the region's Regional Economic Strategy (RES) sets out a 'low carbon' economy as a fundamental aim. In addition, the development of this Climate Change Action Plan is set out in the RES as a 'transformational' activity of the highest importance.

The commitment to act is genuine and the time is past for debates about whether climate change is, or is not, a reality. Described by the Government's Chief Scientific Advisor, Sir David King, as "the most serious problem we are facing today", climate change is now widely recognised as being due in good part to humankind's releases of greenhouse gases such as carbon dioxide. With that scientific consensus established, it now falls to us to make a difference. The predictions for our region are for hotter summers, wetter winters, more flooding and stormier weather; we must urgently start to adapt to these changes. The government has set its targets for reductions in carbon emissions, in particular an aspirational target of 60% by 2050; we must work together to either meet or exceed those targets here in England's Northwest.

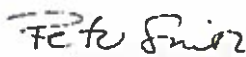
The stakes are undoubtedly high. There is no city or town, no industrial sector, no wildlife habitat or indeed any household that will not feel the impact of climate change in the years ahead. We have a once-in-a-lifetime chance to develop and deploy the strategies and technologies that will secure our future and realise the economic opportunities presented by the changing climate. Recent research suggests that climate change will 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. Moreover, the recent Stern Review has concluded that failure to tackle climate change could result in economic costs of \$2.5 trillion every year, dwarfing the costs required to take effective action now.

Make no mistake, climate change is a 'make or break' issue for this region and no region is better equipped than ours to tackle the environmental challenge of the age.

This Action Plan is only the beginning of our response. It can deliver real progress but only if it is supported by organisations, businesses and individuals throughout the region. Our mission is to make England's Northwest 'the leading region on climate change'; our vision is of a 'low-carbon region that has adapted well to the impacts of climate change by 2020'; it is a vision we can only realise by working together, in partnership. We will develop a new Northwest Climate Change Partnership (NWCCP) to realise the delivery of this Action Plan and monitor our success in achieving our Vision.



Bryan Gray
Chairman
Northwest Regional
Development Agency



Lord Peter Smith
Chair
North West Regional
Assembly Executive Board



Keith Barnes
Regional Director
Government Office for
the North West



Tony Dean
Regional Director
Environment Agency
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Introduction

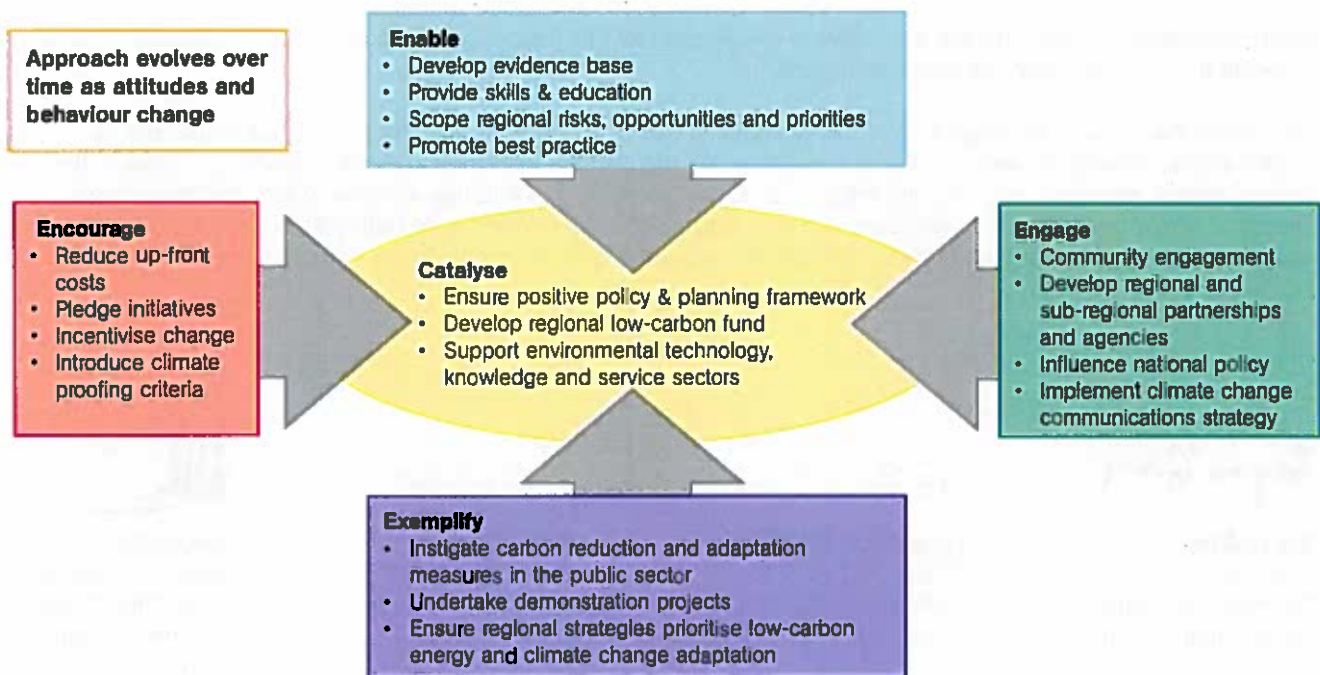
The Northwest Climate Change Action Plan has been developed with input from an advisory group of regional partner organisations and experts. Over 25 workshops and presentations were undertaken as part of the consultation exercise and over 130 responses were received from groups and stakeholders from across the region. The feedback received was overwhelmingly positive and has allowed actions to be prioritised.

This Action Plan sets out a Vision for the region and outlines the associated Outcomes to be achieved by 2020. A full summary of these can be found in the table on pages 6-7. In order for the region to achieve these outcomes, it must focus on the twin Objectives of reducing regional greenhouse gas emissions and adapting to those effects of climate change which are now unavoidable. On pages 3-5, the Action Plan details prioritised Actions for the next three years which need to be delivered within the context of the North West Sustainable Energy Strategy.

A regional Climate Change Action Plan cannot hope to capture all of the diverse actions required to adapt and mitigate for climate change. It is recognised that complementary actions will need to be taken nationally and locally if the vision for the region is to be achieved and these initiatives are to be welcomed.

Priorities for Action

The actions in this plan are restricted to those priorities that can be taken at the regional level in the next three years. Every action within the plan is necessary to move us towards the Vision and Outcomes for 2020. In the short term, we must concentrate on reducing our greenhouse gas emissions by influencing attitude and behaviour change to increase energy efficiency, reduce energy demand and promote low carbon technologies, whilst also putting in place mechanisms to adapt to future climate change. The Action Plan focuses on the ability of regional organisations to enable, encourage and engage individuals, groups, communities, partnerships and businesses in the move towards a low-carbon and well adapted region, recognising that regional organisations must exemplify good practice and catalyse action.



Adapted from 'Securing the Future – UK Sustainable Development Strategy' (HM Government, 2005)

Each action in the Action Plan has a lead organisation. The lead organisation is 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 the action.

All actions are important but the twelve priority actions are highlighted in **Blue Text**. These actions include those which will better coordinate and deliver existing activity and those which are likely to have the greatest impact on greenhouse gas emissions in the short term.

Actions		
Action	Lead Organisation	Relevant 2020 Outcomes
ENABLE		
<p>1 Undertake a programme of research to develop the evidence base for prioritising future regional policies and actions including:</p> <ul style="list-style-type: none"> • Improve regional energy data-sets to monitor progress of the Action Plan and to develop robust regional energy balance forecasting tools • Develop viable regional/local targets for greenhouse gas emissions and uptake of renewable energy generation • Develop a range of regional climate change scenarios and undertake a climate impact assessment of key regional public & business sectors • Review and supplement national market research on the perception of climate change issues and methods to influence behaviour change for use in the communications strategy (see Action 14). 	<p>NWRA</p> <p>NWRA</p> <p>NWCG</p> <p>NWCG</p>	<p>E</p> <p>E</p> <p>E,I</p> <p>E,F</p>
<p>2 Develop and deploy existing tools, criteria and regionally specific guidance to ensure that all regional and local plans, strategies and policies have sustainable energy and climate change impacts at their core.</p>	NWRA	D,E
<p>3 Realise a 'step change' in the effectiveness of regional and national business support organisations to deliver clear, co-ordinated advice & support to business on resource and energy efficiency, sustainable transport planning and climate change risks & opportunities.</p>	ENWORKS	A,D,H,I
<p>4 Undertake scoping studies to assess future regional risks, opportunities and priorities for:</p> <ul style="list-style-type: none"> • The potential impacts and life cycle costs of a range of energy generation technologies (including micro and macro renewables, cleaner fossil fuels, Combined Heat & Power (CHP), nuclear, biomass and waste-to-energy) to meet future forecast energy demands • The potential markets/sector changes as a result of climate change impacts in UK and abroad • The potential for green infrastructure, including regional parks, to adapt and mitigate for climate change impacts and commence implementation of findings • The potential for flood risk and coastal erosion through catchment and shoreline management plans • The potential climate change impacts on the region's landscape, sensitive habitats & species and the contribution of natural systems to carbon sequestration and reduced flood risk • The potential climate impact on the region's health services 	<p>NWEC</p> <p>NWDA</p> <p>CFNW</p> <p>EA</p> <p>NE</p> <p>SHA</p>	<p>C,E,G,I</p> <p>E,I</p> <p>E,I</p> <p>E,I</p> <p>B,E,I</p> <p>E,I</p>
<p>5 Promote best practice in personal and workplace travel planning to enable individuals and organisations to reduce their reliance on private cars and to make more sustainable travel decisions.</p>	NWRA	A,F
<p>6 Develop and implement targeted skills and education programmes to:</p> <ul style="list-style-type: none"> • Raise awareness and facilitate training for senior public sector executives and councillors on the risks and opportunities presented by climate change • Upskill regional procurement staff to increase procurement of low carbon goods and services • Introduce regionally specific sustainable energy and climate change programmes in schools and Higher Education Institutes (HEIs) in association with energy providers • Maintain and increase the capacity of regional universities and HEIs to deliver a future workforce skilled in the research, development and deployment of low carbon technologies 	<p>NWRA</p> <p>NWDA</p> <p>NWRA</p> <p>Joule Centre</p>	<p>F,G</p> <p>A,C,F,G</p> <p>A,C,F,G,H,I</p> <p>A,C,F,G,H</p>

Actions		
Action	Lead Organisation	Relevant 2020 Outcomes
ENCOURAGE		
7 Encourage the installation of microgeneration and energy efficient technologies and maximise regional access to financial mechanisms to reduce upfront costs for: <ul style="list-style-type: none"> Commercial property owners and Householders (including the fuel poor) 	NWDA DEA	C,F,G,H
8 Promote regional pledge initiatives to encourage individuals, groups and organisations to identify and take action to reduce their resource use.	NWDA	F,G,H
9 Support initiatives to encourage the use of sustainable transport (e.g. through the use of demand management measures).	NWRA	A
10 Implement a regional carbon offsetting scheme to mitigate for unavoidable carbon emissions.	NWDA	D,E
11 Introduce criteria attached to public sector capital spend on new and refurbished developments through grant conditions which go beyond minimum standards for energy and resource use, on-site renewable energy production, sustainable transport planning and climate change adaptation.	NWDA	A,D,G,H,I
ENGAGE		
12 Develop and maintain a Northwest Climate Change Partnership (NWCCP) to oversee the coordinated delivery and monitoring of this action plan, facilitate the dissemination of research & information and support sub-regional climate change partnerships and Agencies.	NWRL	A - I
13 Develop and support sub-regional climate change partnerships and Agencies to identify and deliver local action and provide the dissemination mechanism for the implementation of the NW Climate Change Action Plan.	SRPs	A - I
14 Define, develop and implement a targeted regional energy and climate change communications strategy, with regional media and national support organisations, to raise awareness of the causes of climate change and the necessary actions required to mitigate and adapt, using language appropriate to the different audiences.	NWDA	A,C,D,F,G,H,I
15 Increase good practice in public engagement to facilitate the development of low carbon energy generation schemes and support Local Authority planning decisions.	Renewables Northwest	F,G
16 Provide advice and support for regional energy infrastructure development	NWEC	B,D,G
17 Influence national policies and planning guidance to create a conducive environment for regional action on climate change, sustainable transport and energy.	NWRL	A,C,D,G,H
18 Stimulate political debate on the future role of nuclear energy generation in the region.	NWRA	D,G
19 Identify and support the largest public, private and domestic sector greenhouse gas emitters in the region to identify and implement the best opportunities to reduce their contribution (e.g. NHS).	Carbon Trust/EST	A,B,C,H

Actions		
Action	Lead Organisation	Relevant 2020 Outcomes
EXEMPLIFY		
20 All regional and local public sector organisations and executive Agencies should provide dedicated 'invest to save' resources to set and deliver their own carbon reduction targets, implement sustainable travel plans and reduce climate change risks by engaging in the Carbon Trust's Local Authority Carbon Management Programme or similar initiative.	Public sector bodies	A,C,F,G,H
21 Ensure that all regional strategies prioritise an increase in energy efficiency and reduced demand, climate change adaptation, low carbon transport and energy generation using Supplementary Planning Documents where appropriate.	NWRL	A,D,G,H
22 Identify, support and promote demonstration projects on energy efficiency and demand reduction, climate change adaptation measures, low carbon buildings and transport to exemplify best practice.	NWDA	A,B,C,G,H,I
CATALYSE		
23 Ensure a positive policy and streamlined planning framework to: <ul style="list-style-type: none"> Position new developments on current and planned public transport corridors Support the development of new low-carbon energy generation schemes prioritised through the work on Action 4 Support sustainable building design and construction 	NWRA NWDA NWDA	A,D,G
24 Undertake impact modelling of future Northwest aviation scenarios.	NWDA	A,D,E
25 Develop a regional low carbon fund/joint venture to better coordinate and increase the availability of funding for research, development and commercialisation of: <ul style="list-style-type: none"> Low carbon technologies and Low carbon fuels 	NWDA	A,B,C,D,E,G,H
26 Increase the region's capacity to engage with international markets and secure additional national and European funding to grow the region's low carbon energy technologies sector.	Envirolink Northwest	A,B,C,D,E,G,H
27 Develop the market & regional supply chain for biomass & biofuels including energy from waste, waste wood for biomass & the co-firing potential of biomass in larger schemes.	GONW	C,G,I

VISION - A LOW CARBON AND WELL ADAPTED NORTHWEST BY 2020

Reduce Greenhouse Gas Emissions

Adapt to Unavoidable Climate Change

A Transport

There is a safe, reliable & efficient transport network, particularly to places of work, shopping, leisure and other facilities. Expansion of sustainable procurement, improved local services & increased use of IT has reduced the need for travel. As a result of improvements to the UK rail network, better links to the EU rail network and pricing scenarios reflecting environmental impacts, avoidable air travel has decreased. Public transport and car sharing is the transport mode of choice for many journeys. Walking and cycling is preferred for short journeys. As a result, road congestion is reduced and health is improved.

B Capture & Sequestration

Carbon sequestration has increased through the delivery of the Regional Forestry Framework, the sensitive management of soils & improved green infrastructure. The potential for carbon capture technologies and off-setting of unavoidable emissions has been explored and implemented where feasible.

C Low Carbon Energy Technologies

Projects to reduce the emissions of the region's significant greenhouse gas emitters will have been completed. As a result of increased innovation and support for the design and development of low carbon products, the region has a world class environmental technologies sector.

D Policy & Co-ordination

All policies, strategies and programmes take full account of sustainable energy consumption and production issues and facilitate adaptation to climate change. There are improved linkages between active regional and national groups. Communication messages are co-ordinated and funding streams for the development and uptake of low carbon technologies are prioritised and streamlined.

G Energy Supply

As the ease of installation increases & capital costs decrease, property owners & developers have been encouraged to install low-carbon microgeneration infrastructure. As a result, there is an increased level of micro energy generation at the point of use (eg. biomass, Combined Heat and Power, micro solar, wind and ground-source heat pumps).

Energy supplies continue to be drawn from existing sources, but production increases from low carbon macrogeneration sources primarily from a diverse mix of significant on-shore and off-shore renewable energy. The security of energy supplies is assured by this diversification. The potential for new energy generation (e.g. tidal, biomass and energy-from-waste) has been explored, planned & implementation begun where feasible. The unacceptable environmental impact of new generation schemes has been avoided.

E Monitoring & Research

National data sources are more robust & supplemented by additional regional data sets as necessary. Both are used to set targets and regularly monitor progress. Regionally specific research has been conducted to fill the highest priority knowledge gaps and increase the accuracy of regional predictive tools.

H Energy Efficiency and Demand

There is increased awareness and understanding of the cost & benefits of energy efficiency and sustainable consumption lifestyles. Domestic buildings are appropriately heated & insulated and fuel poverty has been eliminated. The uptake of resource efficient goods and services is encouraged through incentives.

All public sector organisations have, and are acting upon, carbon reduction management plans. All public buildings have appropriate insulation and efficient heating systems. Publicly funded developments set new standards in energy efficient design, construction and use.

All high energy business users have, and are acting upon, carbon reduction management plans. The increased use of low carbon technologies in buildings & processes has grown the market for these products and services. There is increased understanding in all businesses of the cost & benefits of energy efficiency and sustainable consumption and production and action is encouraged through incentives.

The region has developed a strong low carbon energy generation supply chain and R&D base. The region has also developed a skilled workforce for installation and R&D in energy generation technologies

F Raising Awareness of and Support for Practical Actions

Communication of the issues has ensured that the region's businesses, organisations and population understand the value of energy and the nature of expected climate changes. They are convinced of the need for action, are actively playing their part and know where to find support.

I Risks & Opportunities

All public and key private and voluntary sector organisations have, and are acting on, climate change management plans to **reduce risk**. Environment organisations and land owners have plans and resources in place to enable the region's green infrastructure, habitats and wildlife to adapt to changing conditions. The most significant risks have been identified and everyone is aware of them. Low-lying areas along the Northwest coast and estuaries have plans in place to adapt to long term sea level rises and increased storms. Sensitive areas and assets are being appropriately protected from the increased risk of flooding. Development is carried out in a way that does not increase residual flood risk and is able to cope with severe weather events.

Realising opportunities for the region's agricultural sector of longer growing seasons and non-food crops has been investigated and progressed. The region's environmental technologies sector has expanded in response to market demand. Relevant regional business sectors are aware of the potential domestic and international business opportunities of global climate change and are acting upon plans to realise these

Key	VISION	Objectives	2020 Outcomes Desired Outcomes for 2020
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Monitoring and Delivery

Accountability for the delivery of the Action Plan will ultimately rest with the Northwest Regional Leaders (NWRL): Northwest Regional Development Agency (NWDA), North West Regional Assembly (NWRA) and Government Office for the North West (GONW). On behalf of the Northwest Regional Leaders, the NWDA will facilitate and support the implementation of the Action Plan, through the Northwest Climate Change Partnership (NWCCP), to ensure delivery of the actions.

Provisional Regional Indicators & Targets

One of the guiding principles of sustainable development is to use sound science responsibly. Where there is a lack of robust regional data on which to base targets, data collection and analysis will be given priority within the Action Plan to ensure that ambitious but achievable targets can be set and future policy is developed on the basis of strong scientific evidence. The targets and indicators shown below are provisional and will be developed further when appropriate data sets become available (estimated dates are shown). The Regional Observatory will report to the Northwest Regional Leaders on the progress of the Action Plan against the indicators and targets set out below. The Action Plan will be reviewed every three years.

Ref.	Main Indicator	Activity to measure	2010 Targets	2020 Outcomes
M1	Greenhouse gases emitted (tonnes CO2 equivalent)	Reduction in Greenhouse gases emitted (%)	To be completed by Summer 2007	A-H
M2	Number of microgeneration installations	Uptake of Low Carbon Building Project grants (%) (2005 baseline: 136 grants)	272 grants taken up	C,G
M3	Low carbon heat & electricity generation (GWh)	i) Increase in Combined Heat and Power capacity installed (2005 baseline: 866 MWe) ii) Monitoring of installation and Renewable Obligation Certificate data (2005 baseline: Installed capacity: 321 MW; Electricity generated: 1049 GWh)	1.5 GW installed capacity Installed capacity: 1,231 MW Electricity generated: 3,500 GWh	C,G
M4	Number of integrated transport or sustainable travel schemes deployed in the region	i) Number of integrated transport or sustainable travel schemes deployed in the region ii) Trips per annum by private car iii) Number of workplace travel plans deployed in the region	To be completed by Summer 2007 Reduce growth rate to zero To be completed by Summer 2007	A,D
M5	Total journeys per annum by bus and rail	i) Non-car-based travel to school (%) ii) Total journeys per annum by bus and rail	Reduction in total journeys to school by car Halt decline in total bus patronage; continued growth of rail patronage	A,D,F
M6	Public sector bodies with carbon reduction management plans in place (%)	Percentage plans in place (%) - Local Authorities (2005 baseline: 20%) - Businesses	80% To be completed by Summer 2007	D,G,H
M7	Research effort for low-carbon technologies, carbon capture and climate-change mitigation and adaptation	Investment in research for: - Low carbon technologies (£, spend) - Climate change adaptation (£, spend)	To be completed by Summer 2007	B,C,E,I
M8	Coverage of flood risk and shoreline management plans	Plans prepared and action being taken (2006 baseline: zero)	100%	I
M9	People taking action on climate change	Percentage of population taking action (2006 baseline: 58%)	75%	F

Key Contacts & Acronyms

Lead Organisations	Contact	
NWRL – Northwest Regional Leaders	Patrick White	patrick.white@nwda.co.uk
NWDA – Northwest Regional Development Agency	Mark Atherton	mark.atherton@nwda.co.uk
NWRA – North West Regional Assembly	Jon Lovell	jon.lovell@nwra.gov.uk
GONW – Government Office for the North West	Laurence Rankin	laurence.rankin@gonw.gsi.gov.uk
NWCCP – Northwest Climate Change Partnership	Damian Burton	damian.burton@nwda.co.uk
Carbon Trust	Kevin Lambert	kevin.lambert@carbontrust.co.uk
CFNW – Community Forests Northwest	Tony Hothersall	tony@redroseforest.co.uk
DEA – Domestic Energy Alliance	Brian Sexton	b.sexton@manchester.gov.uk
EA – Environment Agency	Paul Needham	paul.needham@environment-agency.gov.uk
Envirolink Northwest	Helen Seagrave	h.seagrave@envirolinknorthwest.co.uk
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NWCG – Northwest Climate Group	Steven Glynn	s.glynn@snw.org.uk
NWEC – Northwest Energy Council	Joe Flanagan	joe.flanagan@nwda.co.uk
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Renewables Northwest	Julian Carter	julian.carter@renewablesnorthwest.co.uk
SHA – Strategic Health Authority	Ann Hoskins	ann.hoskins@northwest.nhs.uk
SRPs – Sub-Regional Partnerships		
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Merseyside	Kevin Peacock	kevin.peacock@merseyside.org.uk

Supporting Organisations

Through the consultation exercise, many regional and national organisations offered their support to deliver specific actions identified in the Action Plan. The Lead Organisations will work with them, and any others that come forward, to deliver the agreed actions. A full list of supporting organisations is available on the nwda website.

Further Information

Further information on the Action Plan, the consultation exercise, and links to further information on climate change in the Northwest region can be found at: www.nwda.co.uk/climatechange. The Northwest Climate Change Partnership will use this website to communicate progress on the implementation and monitoring of the Action Plan.

In addition, a new database connecting sustainable energy organisations and showcasing climate change solutions in England's Northwest has been launched. The database 'The Carbon Connection' provides free information on a wide range of sustainable energy activities, climate change programmes and organisations. Researchers, policy makers, energy suppliers and interested organisations can register details of their activities on www.carbonconnection-nw.info

Rising to the Challenge

A Climate Change Action Plan for England's Northwest

November 2006



GOVERNMENT OFFICE
FOR THE NORTH WEST



This document is available in large print, braille, audio tape and the following languages;
Bengali, Chinese, Gujarati, Somali, Urdu and Hindi.
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