Greater Manchester's Climate Change Implementation Plan

- A Summary





Rapid Transition to a Low Carbon Economy

Reducing our CO₂ emissions by 48% from a 1990 baseline

Actively adapting to a changing climate

Embedding 'carbon literacy' in our culture







Foreword

Tackling the issues presented by climate change is going to be the defining challenge of a generation. It demands a response from us all; as individuals, as organisations, as cities and nations. The latest science indicates that a global temperature rise of 4 degrees may now be inevitable and we need to act now to prevent even greater change.

This is a major challenge. Its origins can be traced back to the industrial revolution, so it is fitting that we in Greater Manchester should play a lead part in addressing it. This summary of our Implementation Plan to 2015 outlines our approach and the key link to our overarching objective of securing prosperity for all.

These are not just plans for public bodies, they are plans which every organisation, business and neighbourhood in Greater Manchester can contribute to, and benefit from. They show how we can grasp low carbon economic opportunity and develop ways of becoming a more 'carbon literate' community; how we can substantially reduce our CO2 emissions, while developing the resilience to climate change that is already beginning to happen.

As these plans are delivered, our low carbon future will begin to develop: a sustainable future to hand on to the next generation.



Sir Richard Leese CBE Chair, Low Carbon Hub Vice Chair, AGMA / GMCA Leader, Manchester City Council

Overview

In 2011, approval of the Greater Manchester Climate Change Strategy (GMCCS) created a high level framework of actions to steer Greater Manchester on a course to a low carbon future by 2020. GMCCS set a stretching target for CO_2 emissions reduction – 48% on 1990 levels – as well as setting the strategic agenda for other actions on climate change – transition to a low carbon economy, adaptation to a changed climate and culture change that embeds low carbon thinking in the behaviour of organisations, residents and employees.

This Summary captures the headline actions to be taken to deliver the Greater Manchester Climate Change Strategy during the period from its approval in 2011 to 2015.

This includes:

- Developing integrated plans that incorporate strategies for both mitigation and resilience, low carbon economic development, and cultural change.
- Adopting a 2015 CO₂ emissions reduction target of 2,600 kilotonnes (kt), on 2010 levels, in line with a trajectory drawn up to meet GM's 48% target for 2020.
- Developing and delivering a range of actions that stimulate the low carbon economy –
 promoting resource efficiency, stimulating the sector, investing in skills and accelerating
 economic transition.
- Integrating the contributions of all partners in an integrated approach focused on the GM Low Carbon Hub, its Board and theme groups.
- Including national Government in this partnership, recognising that more than 50% of our emissions reduction target will be delivered through national policy and programme activity, including decarbonisation of national energy supply.
- Investing and delivering major schemes in transport infrastructure; energy (heat and power) infrastructure, use and supply; building retrofit; and flood risk management, to enhance resilience.
- Harnessing GM strengths in research and innovation to explore and demonstrate new mechanisms and technologies; providing stimulus and opportunity for GM businesses.
- Maintaining programmes of stakeholder engagement that optimise the awareness and participation of residents and organisations, and which align low carbon activity with the overarching objective of prosperity for all.

Delivery of the GMCCS to 2020 will only be achieved by embedding targets and cultural change in the plans and operational activity of organisations and neighbourhoods throughout GM. Developing plans and structures to achieve this will be a priority in the period to 2015, creating a platform for more substantial change in the period 2015 to 2020.

The following tables provide an overview of the key commitments, priorities and actions that Greater Manchester needs to undertake to establish the right path for the delivery of our four climate change objectives.

Rapid Transition to a Low Carbon Economy

Action	Measure	Theme Grouo
Established a Sector Growth group to support businesses that can lead a rapid transition to a low carbon economy and developed protocols to enable the group to interact effectively with the other themes' groups.	Low carbon environment goods and services sector growth GVA and productivity measures.	Sector
Developed an active network of engaged businesses with a co-ordinated approach to business support providing companies with the access to knowledge, expertise and practical skills that help them grow and innovate. Use these networks to stimulate and support companies to develop low carbon and environmental goods and services thereby creating local jobs and supporting social and economic and environmental development in a carbon constrained		Sector SCP Skills Sector Skills SCP
world. Developed a clear understanding at all levels within the public and business sectors of the importance and growing potential of the low carbon and		All
environmental sector to Greater Manchester's economic prosperity. Started to use public sector procurement to bring forward innovative low carbon and environmental products and services and develop local industry.		Sector, SCP
Increased the proportions of local content and labour included in low carbon developments Established an active programme of environmental business support, from		Sector All SCP
product and service design to residual waste management. This will include mass engagement via an extended Environment Business Pledge and other GM business networks. This will stimulate demand for low carbon goods and services which be directed towards local supply chains.		Sector All
Developed understanding, deployment and co-ordination of public procurement that optimises the SCP objectives including the delivery of exemplar GM case studies that test outcomes across the constituent components.	Hub Board monitoring	SCP
Developed a sound understanding of how trends in C&I waste may provide void capacity within the collection and recovery infrastructure and how this can be used to increase the value of waste streams arising in GM's SMEs	Hub Board monitoring	SCP
Developed a GM sustainable food strategy that establishes consumption/production baseline data for GM, and prioritises action on key elements of the localfood supply chain,; established demonstrator projects for both supply and demand side actions as well as strategic interventions with key stakeholders.	Hub Board monitoring	SCP

Reducing our CO2 emissions by 48% from a 1990 baseline

Action	Measure	Theme
Achieve a reduction of 220,000 tonnes of domestic carbon emissions by 2015 through undertaking 475,000 retrofitting measures in 431,000 homes.	Uptake of funding schemes	Buildings
Establish effective mechanisms for delivering an ongoing Green Deal programme through the GM Green Deal Delivery Partnership, generating £65.83m of investment in energy efficiency from 15,000 Green Deal plans.	GM Green Deal programme monitoring.	Buildings
Develop a Greater Manchester Low Carbon Hub Investment programme which has delivered significant numbers of public sector buildings projects across GM	GM Low Carbon Hub	Buildings All
Establish a programme for reducing the carbon emissions from commercial and public buildings, including 10 demonstrator projects	NEED database	Buildings Energy
Establish effective mechanisms for delivering robust energy generation projects and infrastructure and for understanding the impact of our actions on climate, resource efficiency and economic performance.	Low Carbon Hub reports	Energy All
Deploy a 'capacity to customers' pilot programme that incorporates smart networks and metering, local energy storage, demand management and price signalling. This will seek to increase the available capacity of the existing electricity grid without the need to install significant new cable infrastructure.	ENW reporting	Energy
Develop specific proposals for heat networks, energy generation from renewables and building-scale renewable heat models, which, by 2020, willresult in the local / locally owned low carbon generation of 3TWh of heat and 1TWh of electricity per annum.	Via DECC datasets	Energy Buildings
Through Electricity North West, completed a £500 million programme for distribution infrastructure and drafted an energy system balancing plan for GM.	Electricity North West reports	Energy
Increase the amount of electricity procured from renewable resources to 20% of GM's commercial requirements and, subject to feasibility, started to offer energy tariffs to customers that retain economic benefits within GM.	Procurement contract evaluation.	Energy
Release £100 million per annum that would otherwise be spent on energy generated outside Greater Manchester , made available to GM's economy by combined demand reduction and local generation and supply activities	Evaluation of projects	Energy
Increase the energy research presence of GM's academic institutions from £100 million to £150 million per year and substantially increased collaboration between research and GM applications.	University research income	Energy Skills
Integrate the ongoing protection, enhancement and extension of green networks and the natural environment into GM's carbon management strategy, including carbon sequestration through the natural environment.	Biodiversity Action Plans and strategies	Natural Capital Group
Metrolink - delivered significant additional Metrolink track, expanding from Manchester City Centre to Altrincham, Bury, Rochdale, Oldham, Salford and Wythenshawe	TFGM Performance Reports	Transport
Bus - develop an enhanced bus network into and across the regional centre, with reduced journey times, increased accessibility and more frequent services. Cycling - develop a GM cycle strategy along with full delivery of the Cycle		Transport
Commuter project. Walking – implement pedestrian friendly new developments will be built along with improved walking routes, especially for shorter trips, to key local transport		Transport Transport
destinations created.		

Actively adapting to a changing climate

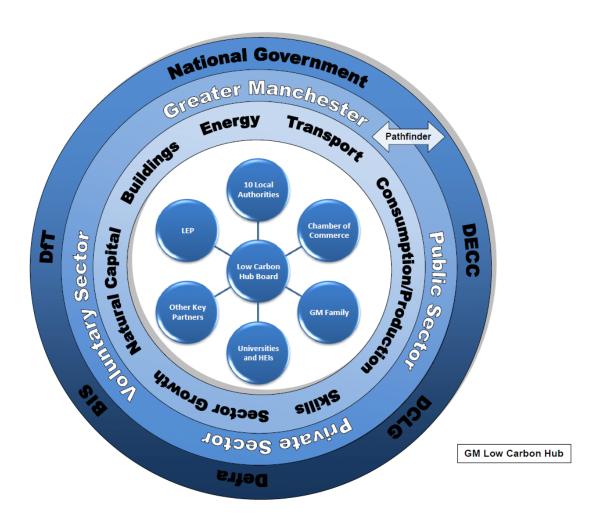
Action	Measure	Theme Group
Take steps to adapt our buildings to climate change risks.	We will co-	Buildings
Create a higher public profile for quality green and blue infrastructure particularly as part of the public realm in city and town centres and incorporated within new housing, employment and regeneration projects, in local spatial polices and strategic investment and economic programmes. Investment in green and blue infrastructure will be targeted to optimise functional benefits and in areas of greatest need.	develop and implement the Core Cities approach to Adaptation	Natural Capital
Develop the co-operation and partnerships on fluvial and surface water management planning and have a GM Flood Strategy in place by 2014, making provision for reducing flood risk across GM, improving flood management and the development of future sustainable urban drainage systems (SUDS), utilising green and blue infrastructure where possible. This will be delivered and measured through the implementation of district Flood Risk Management Plans.	benchmarking	Natural Capital Buildings
Clarify and promote the contribution that 'ecosystem services' from our green and blue infrastructure are making to Greater Manchester becoming a more resilient city region, better adapted to future climate change. This will include a range of demonstrator schemes and planned programmes including new tree planting, improved woodland management, improved water quality, public realm and open spaces.		Natural Capital
Increase the effectiveness of natural capital investment by co-ordinating activity through the Natural Capital Group, (GM's local nature partnership), with delivery taking place through partnerships between the voluntary, private and public sectors including Districts, Environment Agency, Forest Partnerships and the Canal & Rivers Trust. New financing models will be developed to maximise social, economic and environmental value as well as maximising engagement with communities and organisations from all sectors.		Natural Capital
Incorporated green and blue infrastructure into the development and delivery of retrofitting projects and carbon literacy behavioural change programmes.		Buildings All

Embedding 'carbon literacy' in our culture

Action	Measure	Theme Group
A co-ordinated programme of delivering carbon literacy will have been	This will be	All
established, capable of reaching all employees, residents, students and	measured by the	
pupils in Greater Manchester.	numbers of GM	
Provided access to carbon literacy training or advice linked to the use of	residents achieving	All
domestic, public and commercial buildings for the majority of users of new	a carbon literacy	
or retrofitted buildings.	training certificate.	- 11
GM's Low Carbon Hub will be providing an established mechanism for high	Hub Board	All
level operational partnerships internally within GM and between GM and Government Departments.	monitoring	
A suite of KPIs that measure progress will be in operation. These will be	Hub Board	All
developed by integrating the draft KPIs identified in GMCCS and the suite of	monitoring	7
dashboard indicators in development for the refreshed Greater Manchester	momes mg	
Strategy.		
GMCCS integration in the themes of the Greater Manchester Strategy will	Hub Board	All
have broadened the base for delivery and actions on climate change. These	monitoring	
will form part of Business and Implementation Plans for organisations		
throughout GM.		
Five 'theme' Groups - for Buildings, Energy, Transport, Green & Blue	Hub Board	All
Infrastructure and Sustainable Consumption – will be overseeing integrated	monitoring	
plans and programmes and co-ordinating these through the Environment		
Commission.		
All AGMA organisations will have adopted the objectives and themes of	Hub Board	All
GMCCS, all District climate change strategies will integrate with the GMCCS	monitoring	
framework.		
Substantially increased investment in low carbon activity will be channelled	Hub Board	All
through a network of Green Deal partnerships and ESCOs, driving a pipeline	monitoring	
of low carbon projects from design to delivery.		
A common carbon metrics framework will be in place and in use across	Hub Board	All
sectors in GM linking CRC, the collection of air quality data, and national data	monitoring	
sets. This will focus on CO2 emissions, but have a growing capacity to		
estimate and report on consumption metrics, incorporating all embodied		
emissions.		
Further developed our understanding and use of the total carbon footprint	Hub Board	All
of GM and established the role and function for carbon consumption metrics	monitoring	
alongside direct emissions measurement.	II b D !	CCD
Developed a well established a stakeholder network actively contributing to	Hub Board	SCP
the SPC objectives using the ENWORKS partnership as its conduit; bringing	monitoring	All
together and identifying synergies and gaps across the 10 areas.		

How we work

The development of structures to co-ordinate and oversee this work commenced with the strengthening of low carbon in a refresh of the Greater Manchester Strategy and the formation of a Low Carbon Hub as part of GM's Deal for Cities agreement with Government. Progress has also been made on establishing a structure of governance which builds upon Greater Manchester's unique cross-sector partnership working and aligns 7 sub-groups of the Hub to each of the five themes of GMCCS plus the cross-cutting issues of sector development, skills development and engagement.



Key

Inner Hub – Hub Board and Core Team

Radial spokes - GM Centres of Excellence, GM Authorities and established Public/Private sector partners

Inner Ring – Existing and proposed Theme Groups

Middle Ring – Wider Greater Manchester Public, Private and Voluntary Sector

Outer Ring - Central UK Government Departments

Pathfinder – Memoranda of Understanding between GM and relevant UK Government Depts.