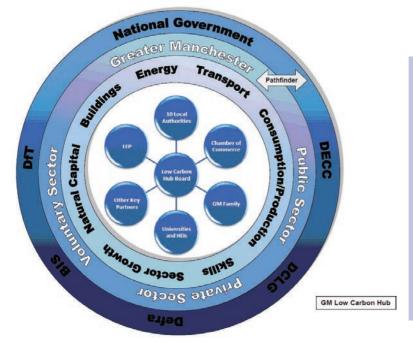
GREATER MANCHESTER LOW CARBON HUB **OUR PRIORITIES**



Key				
Inner Hub:	Low Hub Board and Core Team			
Radial Hub:	GM Centres of Excellence,			
	GM Authorities and established			
	Public/Private sector partners			
Inner Ring:	Low Carbon Hub Theme Groups			
Middle Ring:	Wider Greater Manchester Public,			
	Private and Voluntary Sector			
Outer Ring:	Government Departments			
Pathfinder:	Memoranda of Understanding			
	between GM and relevant			
	Government Departments.			

LOW CARBON HUB PRIORITIES 2013-14

The GM Climate Change Implementation Plan 2013-15 was approved by AGMA in January 2013. Since then, the GM Environment Team has worked with the Low Carbon Hub Sub-groups and Districts to develop detailed Work Programme Priorities for each Sub-group, plus identifying the `enabling' actions required to ensure the Low Carbon Hub operates effectively.

Buildings • Develop and deliver ECO 2013 • Procure, develop and deliver Green Deal 2014-16 • Develop retrofit programme for local authority buildings for JV with GIB	Cross-cutting big issues: • Explore potential of public sector procurement for LCEGS sector and local benefit • Develop common framework for carbon metrics to support decision making • Develop the concept of a GM Energy Enterprise • Enhance communication between the hub and its stakeholders • Adaptation and resilience • Funding and	 which would enable divite develop, trade and manage energy assets, tariffs and consumption Conduct heat trials and feasibility studies (including NEDO, networks and ETI bid) Review GM domestic and commercial energy procurement to identify opportunities Sector growth 	maintaining str despite the rec • There is a £3 demand for GM goods and sen
Skills Analysis of skills requirements Understand existing provision and develop courses to match market need 			 Fossil fuel priby volatile glob renewable gen security and G Rising energ poverty and ur Resource an also lead to ris Electrificatio transform our o GM's natural nised economi potential, inclu resilience to a
 Increase innovation to meet priorities via RGF and EOS Transport Agree governance arrangements Establish emissions baselines and explore 		 Raise the profile of the sector Deliver a sector development programme Maximise the effectiveness of procurement practices Attract inwards investment from overseas 	
interventions to deliver carbon reduction via work plan Natural Capital • Identify key natural capital assets for GM to be protected and enhanced • Progress our ecosystem services work • Develop an investment framework to target		 SCP Identify and support areas where we can make the most difference Regularly communicate to a wide audience Secure the funds needed to enable GM companies to operate more sustainably Integrate SCP services into the wider financial 	

A low carbon, well adapted economy will make Greater Manchester more resilient to future changes, more competitive in the increasingly global marketplace and reinforce Manchester's standing as a leader in innovation.

GREATER MANCHESTER LOW CARBON HUB INVESTING IN GREEN GROWTH FOR GREATER MANCHESTER



Why is Low Carbon Transition required?

There are major economic drivers behind the need for a low carbon transition in Greater Manchester:

- GM's diverse low carbon sector is strong growth rates of 5%, ecession.
- £3.4 trillion global market GM's innovative environmental ervice companies.
- prices and availability are driven obal factors: increased local eneration is vital for energy GM's economy.

rgy costs are increasing fuel

- undermining business viability. and raw material constraints will rising costs for businesses.
- tion of heat and transport will ir energy system.

ral environment has unrecogmic value and significant further cluding a central role in building a changing climate.

Developing a low carbon economy remains an integral part of our recently refreshed Greater Manchester Strategy. At a recent consultation event on the strategy, attended by the Rt. Hon Greg Barker MP, Minister of State for Climate Change, I emphasised that a succesful transition to a low carbon economy was fundamental to the growth of Greater Manchester: "Without green there will be no growth". Since the formation of the Low Carbon Hub in 2012, I have been pleased to sign a number of groundbreaking agreements to cement Greater Manchester's relationship with Whitehall, including Memoranda of Understanding with DECC and Defra and the GM Climate Local Agreement. I've also welcomed the contributions from low carbon projects and innovations from GM's leading-edge businesses and universities who share our vision for Greater Manchester. Reducing our carbon emissions and adapting to the impact of climate change is, the responsibility of a great number of actors who are brought together in the Low Carbon Hub to deliver the Greater Manchester Climate Change Strategy. Together we will invest in green growth in Greater Manchester for the benefit of our businesses and people now and in the future.

The Greater Manchester City Deal

The GM City Deal, agreed in March 2012, included a 'low carbon' priority with three key elements:

The development of a Low Carbon Hub (LCH) for GM integrates the delivery of multiple carbon-reduction measures. It represents a shift from strategy development to prioritised delivery. GM has embedded the Hub within the network of Greater Manchester Centres of Excellence and created strong private and voluntary sector partnership support. The Hub aims to harness the knowledge of our universities with the innovation of our businesses under the strong public governance provided by the Greater Manchester Combined Authority.

The LCH aims to deliver the GM Climate Change Strategy that has four primary objectives:

- changing climate.

GMCA **GREATER MANCHESTER** COMBINED AUTHORITY

resources at key assets

Email: Tel: Web: Twitter:

Funding and

resources

GMLowcarbonhub@agma.gov.uk 0161 237 4638 www.agma.gov.uk/low_carbon_hub twitter.com/GMLowcarbonhub

investment packages

To CONTACT the GM Low Carbon Hub Team:

Integrate SCP services into the wider financial

Foreword from Sir Richard Leese, Leader of Manchester City Council and Chair of the GM Low Carbon Hub Board

1. developing a GM Low Carbon Hub as a centre of excellence; 2. establishing a joint venture with the Green Investment Bank to finance energy efficient infrastructure; and

3. developing memoranda of understanding between GM and key government departments to deliver shared priorities.

1. We will make a rapid transition to a low carbon economy. 2. Our collective CO2 emissions will have been reduced by 48%. 3. We will be prepared for and actively adapting to a rapidly

4. 'Carbon literacy' will have become embedded into the culture of our organisations, lifestyles and behaviours.

THE GREATER MANCHESTER LOW CARBON HUB BOARD WHO WE ARE



CHAIR GREATER MANCHESTER LOW **CARBON HUB BOARD**

Sir Richard Leese, Leader of Manchester **City Council**



CHAIR: SECTOR **GROWTH GROUP**

Paul Maher, **Chief Executive Officer,** Siemens Infrastructure & Cities

Paul was appointed as CEO for Siemens Low & Medium Voltage and Smart Grid Divisions, North West Europe in October 2011. He has responsibility for driving Siemens growth strategy in the rapidly developing Smart Grid Sector for Region North West Europe.



LEAD CHIEF EXECUTIVE FOR LOW CARBON & THE ENVIRONMENT, GMCA

Charlie Parker



GM DIRCTOR OF ENVIRONMENT, GM LOW CARBON HUB, GMCA

Mark Atherton



CHAIR: GM ENERGY GROUP

Cllr Neil Swannick, Manchester City Council & Chair of **GMWDA**

A Manchester City councillor representing Bradford East ward in East Manchester. Cllr Swannick is also the Chair of the Greater Manchester Waste Disposal Authority (GMWDA). Cllr Swannick is the NW representative on the UK Delegation to the EU Committee of the Regions based in Brussels.

CHAIR: SUSTAINABLE **CONSUMPTION &** PRODUCTION GROUP

Martyn Hulme, Managing Director, **Co-operative Estates**

Responsible for managing one of the UK's largest property estates, Martin is a gualified Accountant and MBA.Martin actively seeks to drive down carbon and environmental impacts by the Co-operative Group. The recently opened '1 Angel Square' building in Manchester is a demonstration of the leading edge sustainability credentials of the Group.



203 Department of Energy & **Climate Change**

BOARD MEMBER



CHAIR: LOW CARBON SKILLS SUB GROUP

Alun Francis, **Principal and Chief** Executive of The Oldham College

CEO of Oldham College since February 2010, Alan was previously Director of Transforming Learning, leading Oldham Council's Building Schools for the Future Programme. Following an academic career. Alan worked in a variety of urban regeneration schemes including the regeneration of East Manchester.

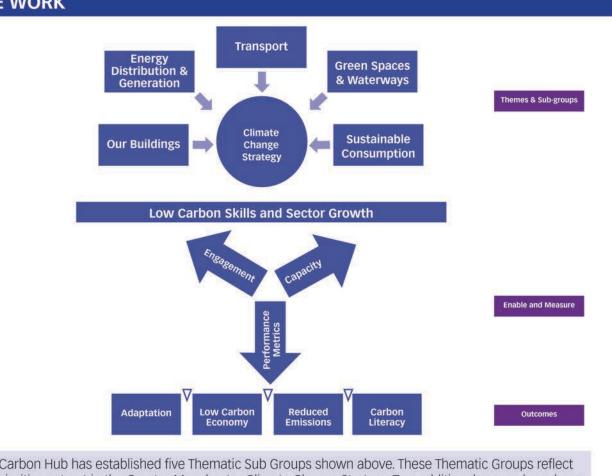


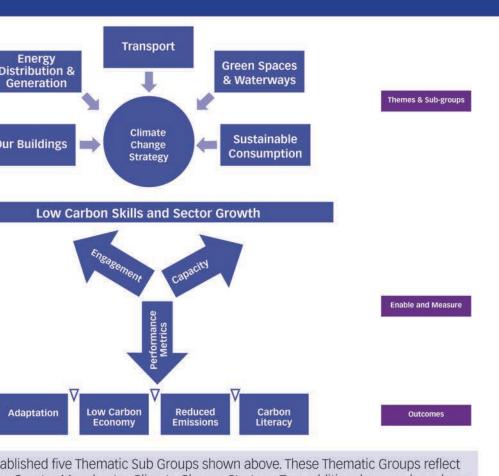
CHAIR: TRANSPORT GROUP

Andrew Cowan, Chief Operating Officer, Manchester Aiport Group (MAG)

Andrew joined MAG in January 2013 as Chief Operating Officer, responsible for airport operations and capital investment programmes. Prior to joining MAG he was the CEO of Robertson Group, an infrastructure, construction and services company and previously held a number of senior positions in the utility industry covering: asset management, operations and customer service, both in the UK and overseas.

HOW WE WORK





The Low Carbon Hub has established five Thematic Sub Groups shown above. These Thematic Groups reflect the five priorities set out in the Greater Manchester Climate Change Strategy. Two additional groups have been formed to address the cross cutting issues of low carbon skills and sector development.

The majority of the Board members chair one of the Hub's subgroups. Each sub-group also has representation from GM's public, private and voluntary sectors.



Ashley is responsible for managing 22,600 dwellings, the largest social housing portfolio in Greater Manchester. For the past three years, Ashley has been actively helping to deliver the GM Climate Change Strategy and leads the Buildings theme group which is steering the Green Deal in GM.



An environmental voluntary sector CEO with 25 year's experience of formulating alliances, representation, advocacy and high level leadership. In addition to chairing the Natural Capital Group, Greater Manchester's Local Nature Partnership, Anne is also

a board member of two neighbouring LNP's.

BOARD MEMBER: COMMUNUICATION



Elm Law is a specialist environmental law practice supporting law firms, developers, local authorities and the environment industries. Keith has a Master's degree in Environmental Law and was previously a partner at Eversheds, Cobbetts and Head of Environment at Pannone LLP.



BOARD MEMBER

Dr Clive Elphick, **Environment Agency**

Clive is a trustee of the Lancashire Wildlife Trust. He is a past chair of the Confederation of British Industry for the North West of England, and a former Board Member of a UK Department of State, a Regional Development Agency and of a Utility Regulator. Clive previously held a number of Director Roles at United Utilities Group PLC.



BOARD MEMBER

Roger Milburn, **Director**, Arup

Having worked for Arup for over 30 years, Roger has held many Board positions and global roles including Global leader for the Civil Engineering, Site Development and Regeneration Practice. His particular areas of expertise are cities, large-scale master planning, urban regeneration, sustainability and multidisciplinary working, Roger is a Visiting Professor to the University of Manchester and a CABE Expert.