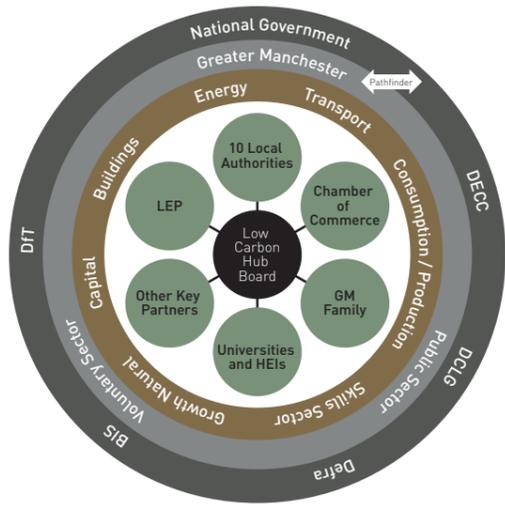


GREATER MANCHESTER LOW CARBON HUB

OUR PRIORITIES



KEY

- Low Hub Board and Core Team
- GM Centres of Excellence, GM Authorities and established Public/Private sector partners
- Low Carbon Hub Theme Programmes
- Wider Greater Manchester Public, Private and Voluntary Sector
- Government Departments

Pathfinder: Memoranda of Understanding between GM and relevant Government Departments.

LOW CARBON HUB PRIORITIES 2015-16

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 theme, plus identifying the 'enabling' actions required to ensure the Low Carbon Hub operates effectively.

<p>Buildings</p> <ul style="list-style-type: none"> Deliver 5,500 domestic retrofit measures and demonstration homes Facilitate work with the private sector to encourage commercial buildings retrofit Drive the business case for public sector buildings retrofit 	<p>Enablers</p> <ul style="list-style-type: none"> Adaptation and resilience Behaviour change Communications Influencing GM policy and strategy, Monitoring and metrics Funding / bid development Review of 12-15 implementation plan; update to 2020 (building on wedges approach) 	<p>Energy</p> <ul style="list-style-type: none"> Explore GM Energy Enterprise Deliver priority heat network and smart heat programmes, assess potential for wind, geothermal and hydro Support research on energy infrastructure planning and behaviour change
<p>Transport</p> <ul style="list-style-type: none"> Review outputs from GM Carbon Metrics Study and establish potential options to reduce carbon emissions Utilise low carbon transport study outputs to identify key strategic interventions 		<p>SCP</p> <ul style="list-style-type: none"> Help businesses to benefit from transition to a more sustainable economy Encourage and enable choices which reduce waste and maximise value of waste streams Develop GM approach to sustainable food Support public sector procurement to maximise SCP gains
<p>Natural Capital</p> <ul style="list-style-type: none"> Act as ambassador for the natural environment Identify key green and blue infrastructure and biodiversity assets Quantify value of natural environment assets Develop an investment framework 		<p>Skills</p> <ul style="list-style-type: none"> Maximise job and training opportunities through the Green Deal programme Identify skills demand required to deliver work programmes Work with colleges / training providers to articulate skills development needs for a GM low carbon economy
<p>Sector growth</p> <ul style="list-style-type: none"> Raise the profile of the LCEGS sector Deliver a sector development programme Attract inwards investment from overseas Monitor impact of the social value procurement framework 		

TO CONTACT THE GM LOW CARBON HUB TEAM

Email: lch@neweconomymanchester.com
Tel: 0161 237 4483
Web: www.greatermanchester-ca.gov.uk
 www.gmlch.onthepatform.org.uk
Twitter: @GMLowcarbonhub



GREATER MANCHESTER LOW CARBON HUB / NOV 15

INVESTING IN GREEN GROWTH FOR GREATER MANCHESTER

Foreword from Cllr Sue Derbyshire, Leader of Stockport Council and Chair of the GM Low Carbon Hub Board



The Low Carbon Hub Board is responsible, on behalf of the Greater Manchester Combined Authority (GMCA), for developing and putting in place the delivery arrangements for GM's Climate Change Strategy and other environmental priorities. The Hub has a very diverse membership of people and organisations who put their valuable time into this agenda, helping to influence and promote environmental sustainability to a wider audience. Reducing our carbon emissions and adapting to the impact of climate change is the responsibility of everyone. Together we will invest in green growth in the region for the benefit of our businesses and communities, now and in the future.

It's an exciting time to be the Chair of the GM Low Carbon Hub with so much progress being made since the publication of our Climate Change Strategy in 2012; a firm foundation has been laid to engage our partners and to support delivery of our targets. With CO₂ emissions of 15.3 million tonnes in 2013, Greater Manchester has now cut its emissions by 27% since 1990, against our target of a 48% reduction by 2020.

Headlines and highlights from this year's annual Environment Report include:

- Delivery of a range of carbon reduction projects ranging from energy efficiency in buildings and public transport to demand side response trials;
- The launch of a dedicated GM project development unit to invest in low carbon infrastructure;
- New international commitments including Compact of Mayors, Under 2MOU and Mayor's ADAPT; and
- A new Green Growth Pledge scheme, where businesses and organisations can make a commitment to Greater Manchester's low carbon future.

The past year has seen the Hub supporting Carbon Literacy rollout across several GM Districts, a pilot school installing 250kw photovoltaic cells and an electric vehicle charging point (a UK first) plus a further £1.2m of identified works across 18 schools, plus the successful delivery of the £6.1M Green Deal Communities domestic energy efficiency scheme. Also we're excited about the partnership with Japan's New Energy Development Organisation (NEDO) to install innovative heat pump technology in many households in Bury, Wigan and Manchester. This project focuses on trialling energy demand reduction and cutting carbon emissions using low carbon energy technologies with advanced IT.

We have recently agreed a devolution deal with UK government to better align national policies and programmes with Greater Manchester priorities. We are looking to set out our own future targets, and have recently consulted on the new GM Climate Change and Low Emissions Strategies Implementation Plan, where an agreed agenda has been set out for the next five years with the commitment and support from our many stakeholders.

THE GREATER MANCHESTER CITY DEAL

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

- Developing a GM Low Carbon Hub as a center of excellence;
- Establishing an investment vehicle to finance energy efficient infrastructure; and
- Developing memoranda of understanding between GM and key government departments to deliver shared priorities.

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 prioritized 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 GMCA.

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

- We will make a rapid transition to a low carbon economy.
- Our collective CO₂ emissions will have been reduced by 48% by 2020.
- We will be prepared for and actively adapting to a rapidly changing climate.
- 'Carbon literacy' will have become embedded into our behaviour.

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 maintaining strong growth rates of around 4% (renewable energy 5.6%) per annum;
- There is a £3.4 trillion global market demand for GM's innovative environmental goods and service companies;
- Fossil fuel prices and availability are driven by volatile global factors: increased local renewable generation is vital for energy security and GM's economy;
- Rising energy costs are increasing fuel poverty and undermining business viability;
- Resource and raw material constraints will also lead to rising costs for businesses;
- Electrification of heat and transport will transform our energy system;
- GM's natural environment has unrecognised economic value and significant further potential, including a central role in building resilience to a changing climate.

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.

THE GREATER MANCHESTER LOW CARBON HUB BOARD

WHO WE ARE



CHAIR GREATER MANCHESTER LOW CARBON HUB BOARD
Councillor Sue Derbyshire
 Leader of Stockport Council

Sue has held Executive positions in Stockport for Transportation, Regeneration, Communities and Finance. Deputy Leader from 2007,

Sue became Leader in May 2012 leading a Liberal Democrat Executive as the largest group in a No-Overall-Control Council. At a GM level, Sue is a member of the LEP, Chair of both AGMA Planning & Housing Commission and the Low Carbon Hub, in addition to membership of the GMCA and AGMA Leaders.



LEAD CHIEF EXECUTIVE GREATER MANCHESTER LOW CARBON HUB BOARD
Steve Rumbelow
 Chief Executive Rochdale Council

Steve took up his current post in 2014, having previously been Chief Executive of Burnley Council.

Steve has worked in Local Government for 35 years with Manchester City Council, Leeds City Council, Ashfield District Council and Rotherham Borough Council. Steve is the Lead Chief Executive on environment, climate change and low carbon for the GMCA/AGMA.



Gordon Whitaker
 Environment Manager for the Environment Agency, Greater Manchester, Merseyside & Cheshire

Gordon is the Environment Agency's Environment Manager for Greater Manchester. He is supporting the Board's understanding of the Agency's role in adapting to the impacts of climate change and limiting the effects of greenhouse gas emissions.



Roger Milburn
 Director, Arup

Roger has worked for Arup for over 35 years; holding a number of board positions and global roles including

Global leader for the Civil Engineering, Site Development and Regeneration Practice. His focus and areas of expertise are cities, large-scale master planning, urban regeneration, critical city infrastructure, sustainability and multi-disciplinary working.



Alison Gordon
 Director of Policy, New Economy Manchester

Alison is responsible for New Economy's involvement in the key policy areas of Low Carbon, Planning and Housing and Europe.



Louise Blythe
 Executive Producer, BBC Academy

Louise works for the BBC's training department and chairs the Low

Carbon Hub in MediaCityUK where ITV, Peel Holdings, Dock10, Creative Skillset and the BBC work together to develop training in low carbon behaviours.

Louise is responsible for designing and delivering the BBC's digital skills programme providing capability for creating and broadcasting online content.



Nigel Mellors
 Pro-Vice-Chancellor for Research & Enterprise at the University of Salford

Nigel's key responsibilities are Research Councils and industrial partnerships at the regional, national and international levels. Nigel's research interests are in the area of nano materials and in energy demand reduction within the built and human environment.

Nigel also sits on a number of boards including the Local Management Committee for the Local Enterprise Partnership (LEP) of Manchester.



Anne Selby
 Chief Executive Officer, Wildlife Trust for Lancashire, Greater Manchester & North Merseyside

An environmental voluntary sector CEO with 25 years' 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 the Greater Manchester European Programme Monitoring Committee.



Councillor Elaine Sherrington
 Bolton Council

Councillor Elaine Sherrington is Labour Member for Bolton and Member of the Greater Manchester

Waste Disposal Authority.

Councillor Sherrington is Chair of the Authority's Resources Committee which monitors the overall budget of the Authority and its zero waste agenda, and working with stakeholders to drive forward sustainability, encouraging Greater Manchester citizens to participate in prevention, re-use and recycling.



Councillor Eunice Smethurst
 Wigan Council

Eunice has been a Councillor since 1996, representing Abram Ward in Wigan. She is a Trustee of Wigan

Leisure and Culture Trust.

Since 2008 she has been a member of Transport for Greater Manchester (TfGM) and is the Vice Chair of Capital Projects and Policy Committee.

Councillor Smethurst is also a member of the Wigan Flashes Conservation and Community Group.



Steve Johnson
 Chief Executive Officer, Electricity North West

Steve Johnson has been Electricity North West's Chief Executive Officer since

September 2008. He is a member of the UK Government's Smart Grid Forum, leading the Energy Sector's smart grid strategy and is also the Chairman of the Greater Manchester Energy Group.



Julian Packer
 Low Carbon Investment Director, GMCA Core Investment Team

Julian joined GMCA in April 2014 from Cogenco Ltd where he was Engineering and Operations Director and had been Chairman of the Combined Heat and Power Association (now the Association for

Decentralised Energy). He is leading the development of the Low Carbon Project Delivery Unit which is hosted within the GMCA Core Investment Team.



Mark Atherton
 B.Sc (Hons); M.Sc; M.A. (Dist) Greater Manchester Director of Environment

Mark is responsible for Greater Manchester Environmental Strategy, Policy and Research and provides strategic support for the Low Carbon Hub Board.



Robin Lawler
 Chief Executive, Northwards Housing

Robin is the Chief Executive of Northwards Housing, the 3 Star ALMO set

up to manage and improve Manchester City Council's 13,500 homes in North Manchester. Robin also chairs the North Manchester Housing Partnership and the Greater Manchester Buildings Sub-Group.



Paul Maher
 Divisional Managing Director, Siemens

Paul was appointed Divisional Managing Director for Siemens Energy Management

Division GB&I in October 2014. He has responsibility for driving Siemens growth strategy in the rapidly developing Intelligent Networks Sector.

Alongside this role, he is also an Executive Board Member of Siemens PLC and Chair of Siemens PLC Talent & Skills Management Board.



Ian McAulay
 Executive Director of Pennon Group plc & Chief Executive of Viridor

Ian has more than thirty years of

global experience in Strategic Business Management, Regulated Utilities Management and Capital Investment Delivery. He is also a key member of the Strategic Partnership Board of the Greater Manchester Waste Disposal Authority.

HOW WE WORK

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

Each sub-theme has representation from GM's public, private and voluntary sectors.

