

Greater Manchester Under 2 MOU Appendix



Greater Manchester is located in the heart of the North of England, UK. An engine of economic growth since it kick-started the Industrial Revolution in the 18th Century, Greater Manchester is known for its rich sports and cultural assets, one of the largest student communities in Europe and from Rutherford via Rolls Royce to Graphene, an unrivalled innovation and research base.



Cutting carbon emissions by 48% between 1990 and 2020

Growing a low carbon economy

UK's 3rd largest low carbon and environmental goods and services sector generating £3.4 Billion GVA and 37,000 jobs



Adapting to a changing climate

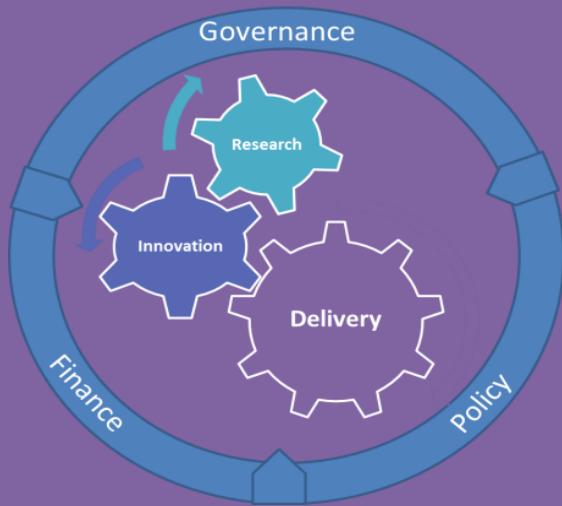
Mayors ADAPT, Ecocities adaptation pilot and the EU RESIN £1.2 million climate adaptation project

Promoting Carbon Literacy

A UK reputation for its pioneering work in championing action on Climate Change



Governance



In 2014 Greater Manchester reviewed its governance arrangements for low carbon as part of the development of a Combined Authority, and to strengthen the links to key delivery organisations. The Low Carbon Hub Board meets quarterly, and establishes and oversees a wide range of public and private sector initiatives, groups and project boards. It reports into the GMCA's Executive via its Chair, Cllr. Sue Derbyshire. Small teams within the delivery organisations support the work of the Low Carbon Hub.

The new Board comprises:

- A GM local Authority Leader and Chief Executive,
- National Government,
- Board representatives from TfGM, New Economy, the Growth Company and Core Investment Team.
- Business, third sector and academic thought Leaders

In May 2015 Tony Lloyd was appointed as Mayor of the Greater Manchester Combined Authority.

Policy

Greater Manchester's Climate Change Strategy 2010-20 shapes the work of the Low Carbon Hub. Priority interventions are summarised in GM's Climate Change Strategy Implementation Plan 2012-15.

Work to develop a 2016-20 Plan began in Autumn 2014 and will be completed in Spring 2016. <https://goo.gl/UPucsk>



Key policy initiatives being undertaken by the Hub include:

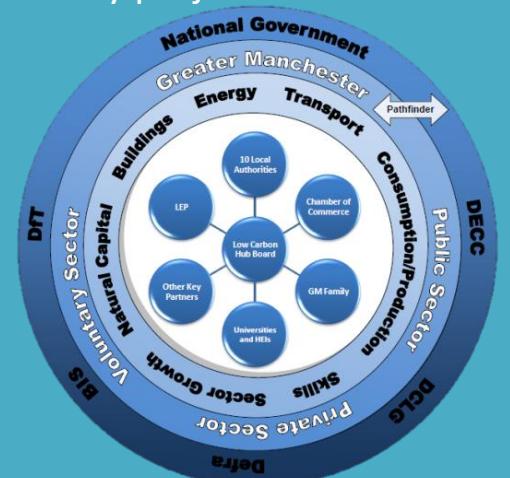
- Inputting to a new spatial framework and Plan for Greater Manchester, also transport, air quality and poverty policy
- Working with government on new legislation, policies and programmes
- Working with Greater Manchester's Universities to secure research income, develop policy and performance frameworks
- Developing innovative ways to invest, trade, retail and deploy energy and its infrastructure
- Upgrading Greater Manchester's public estate, schools and housing stock
- Promoting the inclusion of low carbon priorities into devolution
- Using a 'Low Carbon Wedges' approach to identify performance and priorities.

Finance

2014-15 has seen significant progress in shifting Greater Manchester's focus from planning and development to delivery.

Funding successes include:

- A €2.7 million grant from the European Investment Bank's ELENA fund to deliver the low carbon project pipeline
 - £300K for heat network feasibility and £99K to establish a District Energy Procurement Agency
 - €40 million ERDF funds have been ring-fenced for low carbon investments
 - A £3m programme of resource efficiency business support has been delivered
 - A £30m domestic demand response and heat programme and £6m retrofit initiative.
 - A £20m 'Velocity' cycling infrastructure grant
 - €1.2 million for RESIN adaptation planning and a share of €24 million Horizon 2020 to demonstrate smart green technologies
 - £30 million to deliver low carbon network innovation pilots e.g DSR by Electricity North West.
- A Low Carbon Investment Unit has also been established to oversee a significant pipeline of low carbon infrastructure and buildings energy efficiency projects.



BOLTON
BURY

MANCHESTER
OLDHAM

ROCHDALE
SALFORD

STOCKPORT
TAMESIDE

TRAFFORD
WIGAN

Energy

- A £250m+ programme of heat network, generation and demand reduction projects has been established.
- Over £100 million of energy research is in place across the GM universities.
- The £30 Million NEDO project is delivering 600 ICT linked air source heat pumps in houses across Wigan, Bury and Manchester
- A new project with the UK ETI and Energy Catapult will establish Energy Masterplanning and technology demonstrators as one of three national pilots.



Buildings

- Since 2011/12 GMEAS and framework partners have installed over 27,000 retrofit measures in private sector homes across GM saving a total of 15,000 tonnes of CO₂/year.
- Social Housing partners have saved 50,000 tonnes CO₂ via installing 100,000 measures since 2010.
- A £3m school retrofit programme is in place and outline business cases for retrofitting 379 public properties have been developed.



Transport

- Electric charging posts, electric bus fleets and car clubs have been launched.
- New metrolink lines to the airport, Didsbury, Rochdale and Oldham are transforming commuter travel.
- A £20m Velocity cycling grant will deliver a major new network of segregated cycle routes.
- Salford City Council has introduced 'Greenwheels'; which is transforming work travel and accelerating electric vehicles deployment.



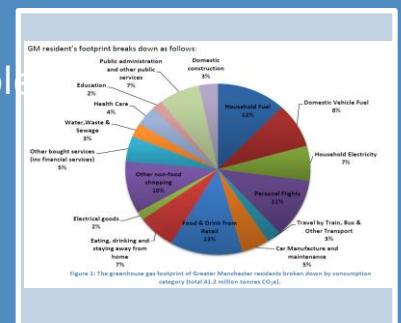
Natural Capital

- Heritage Lottery funds will deliver significant habitat enhancements in the 'Great Manchester Wetlands'; designated a Local Nature Improvement Area.
- GM is delivering 2 of 4 DEFRA Ecosystem Services Action Learning Projects and a 'turning the Red River Blue' project on the Medlock.
- Four GM River Catchment Partnerships have been established.
- The River Roch has been de-culverted in Rochdale Town Centre.



Sustainable Production & Consumption

- An 81MW CHP waste to energy plant has been built for GM's domestic waste.
- A new social value framework is embedding low carbon and social justice principles in procurement and a sustainable food alliance is being formed.
- A £3m programme of business support has delivered resource efficiency and growth opportunities for 1800 businesses,
- GM Fire's water conservation innovations are being transferred to other services
- A carbon literacy programme is being rolled out by employers and community groups



Sector & Skills

- GM's Low Carbon Environmental Good and Services sector is the 3rd largest in the UK, employing 37,000 people with annual sales of £5.4billion and annual growth of around 4% (renewable energy 5.6%).
- New Sustainable Engineering UTC colleges have been launched in Oldham (The GM) and Bolton, in addition to the Green technology facilities already established at Stockport, Wigan and Oldham.



GM CO₂ emissions 2013



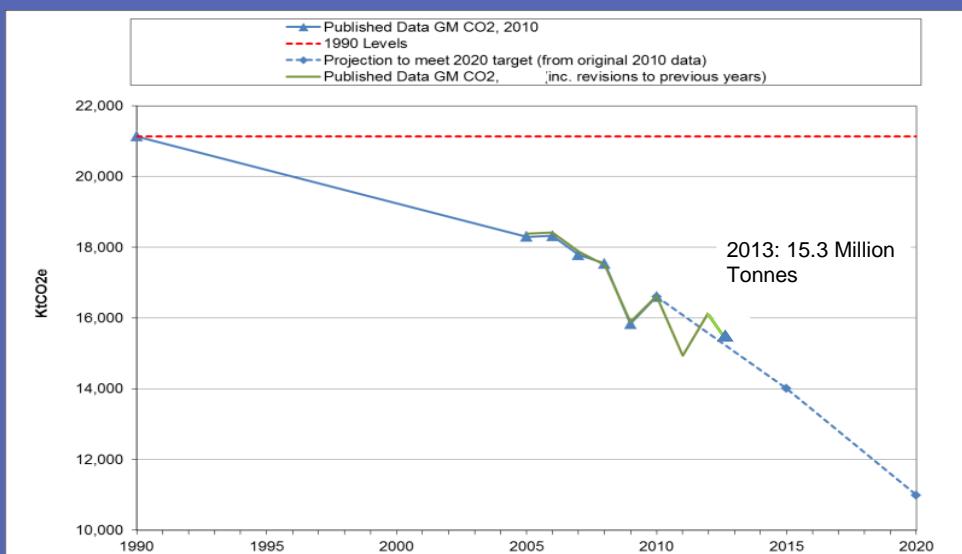
Performance

Greater Manchester's emissions reduced by around 3% between 2012 and 2013, This figure needs to be over 10% per year if the 2020 target is to be met. In 2013 Greater Manchester:

- Emitted 272 tonnes of CO₂ per £million GVA generated and households emitted slightly over 2 tonnes per capita;
- Used 53 TWh of energy and has 72MW of microgeneration capacity.
- Recycled 51% of its domestic waste.
- Engaged 400 Businesses on resource efficiency during 13/14 achieving £9.7m cost savings identified and £8.5m in secured and additional sales;
- Since its start in 2001, the business engagement programme has cut over 1 million tonnes of CO₂
- Retrofitted almost 3,000 houses and 477 participated in Green Deal communities.
- 26% of journeys were made by means other than by car.
- 6 LAs and 20 social landlords have implemented carbon literacy training.

If GM continues on its current trajectory, it will miss its 2020 target. We need to identify at least 1 million tonnes of further carbon reduction actions in order to meet our goal.

CO₂ Emissions 1990-2013



Commitments

Greater Manchester is:

- a signatory to Mayor's EU Mayor's Adapt and the UN resilient Cities Initiative; committing to develop a comprehensive local strategy for integrating adaptation into existing plans.
- a signatory to the Compact of Mayors 'Under 2MOU' and Core Cities climate change commitments
- part of the Carbon Disclosure Project

Greater Manchester's businesses and organisations can now make their own Pledge at:
www.green-growth.org.uk



Links

- <http://gmlch.ontheplatform.org.uk>
- www.greatermanchester-ca.gov.uk
- www.agma.gov.uk/lowcarbonhub
- <https://www.green-growth.org.uk>
- www.gmwda.gov.uk
- www.tfgm.com

Contacts

GM Environment Team

Tel: +44161 237 4483

Twitter @GMLowCarbonHub

Email: Ich@neweconomymanchester.com

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The Future

A lot has already been achieved but there is still more to do.

Headlines include:

- Delivering a £250m plus programme of heat networks, low carbon generation and demand reduction projects
- Establishing energy generation and trading in a way that delivers value to local stakeholders
- Operating a major programme of low carbon business support
- Stepping up action to ensure future development is low carbon and improve the resilience of existing buildings and infrastructure to a changing climate
- Climate proofing (emissions and risks) our major investments and assets