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Carbon Strategy in the North West

Cllr. Neil Swannick

Greater Manchester Environment Commission
Chair, Greater Manchester Waste Disposal Authority
Chair, Greater Manchester Energy Group
Member of EU's Committee of the Regions
Member of Manchester City Council

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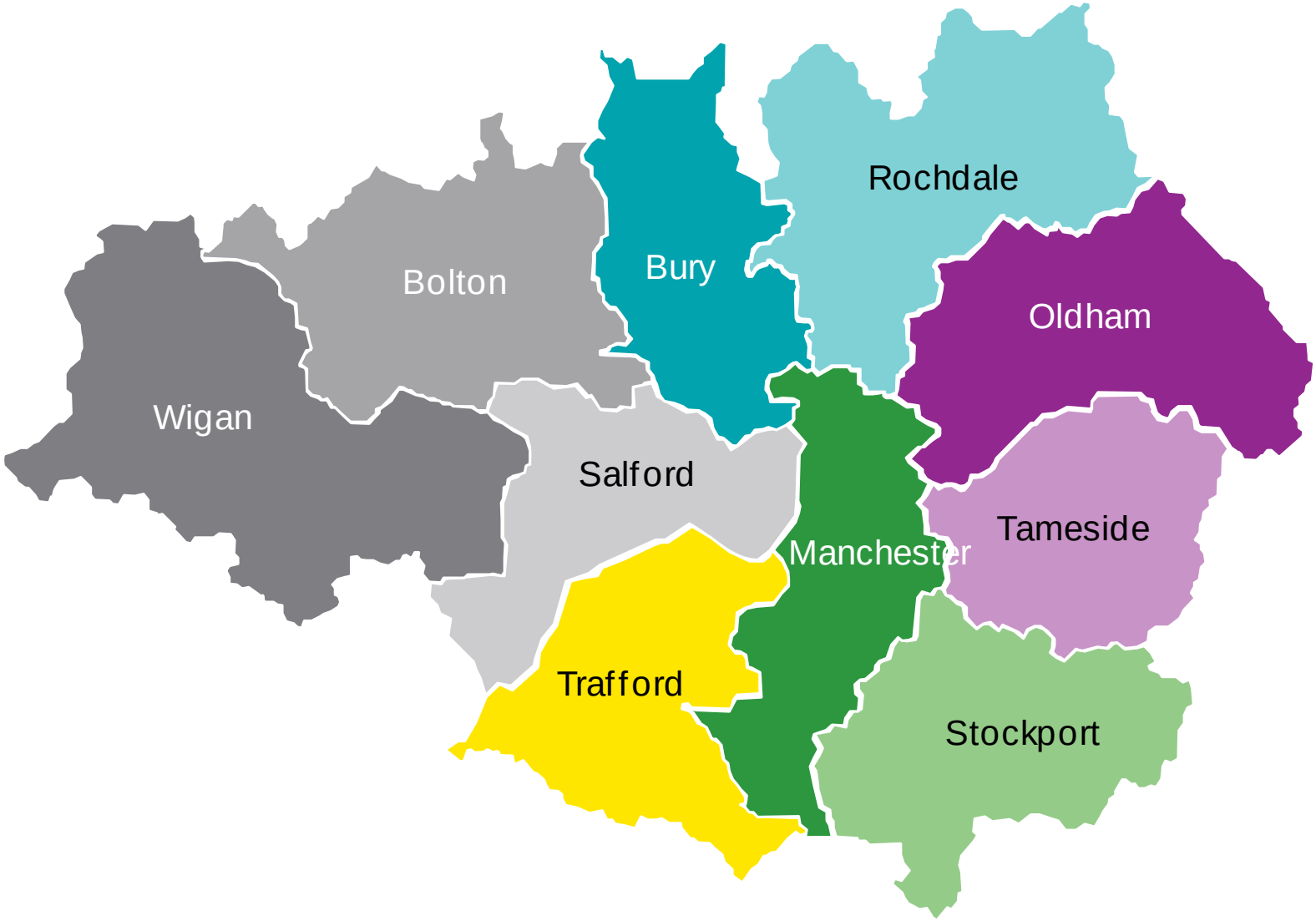
North West Context

- North West Climate Change Forum now operated by the Environment Agency
- Most actions now subsumed into local areas
- Formation of Local Enterprise Partnerships
- Formation of Greater Manchester Combined Authority

PROSPERITYINNOVATIONOPPORTUNITY
SUSTAINABILITYGREATER MANCHESTER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Greater Manchester

- A Combined Authority, and Greater Manchester Strategy commitment to:
    - *Rapid transformation to a low carbon economy*

    (Greater Manchester Strategy, 2009)

- A mini stern review, providing empirical evidence about the potential of GM's low carbon economy

- A climate change strategy agreed by all Greater Manchester Authorities in July 2011 to achieve:

    - *a 48% reduction in direct CO2 emissions by 2020*

    (based on 1990 levels)

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Greater Manchester's Climate Change Strategy

- 5 thematic priorities:
  - Energy
  - Buildings
  - Sustainable Production and Consumption
  - Transport
  - Green and Blue Infrastructure

- Each theme is supported by a multi –sector group who plan and execute actions to support the delivery of the Climate Change Strategy

- Work is overseen by the Greater Manchester Environment Commission

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Greater Manchester's Vital Statistics

Carbon profile:

- In 2005, our direct CO2 emissions were a little over 18 million tonnes, decreasing by 4% to around 17.5 million tonnes by 2008

What we use:

- In 2009, GM used 25.8 TWh of gas and 11.7 TWh of electricity.
- Around 20 TWh of petroleum products was
- used for transport activities.
- Since 2005, gas and electricity use have decreased by 17% and 9%
- respectively, with the commercial sector achieving the most significant efficiencies.
- Transport fuel consumption has increased.

What it costs:

- In 2010 the average household spent over £1,100 on gas and electricity, an increase of 20% since 2007.
- In total, GM spent over £5 billion on its gas and electricity bills during 2010.

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Greater Manchester's Energy Challenges

- Carbon emissions reduction and associated market drivers, including an ambitious CO2 emissions reduction target of 48% by 2020;

- Ageing and vulnerable distribution infrastructure, which needs to adapt to new connection, management and two-way flow requirements;

- A drop in UK generation due to the decommissioning of old nuclear, gas and fossil fuel power stations;

- The price, availability and impacts of fossil fuel extraction, distribution and use;

- Increasing electricity demand associated with uptake of digital technologies, and, in the mid term, switching from fossil fuels to electricity for heat and transport.

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Greater Manchester's Response

- Change energy systems, use and behaviour to capitalise on times when intermittent renewable supplies are abundant and network capacity is available;

- Identify opportunities and locations for new low carbon energy generation and distribution infrastructure, aiming for GM to host 1TWh/year of electricity generation and 2-3TWH of heat generation by 2020, requiring a total investment of around £3.5 billion to achieve this;

- Harness the substantial economic opportunities arising from the changing ways in which Greater Manchester and the world will meet its future energy requirements;

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Greater Manchester's Response

- Support partners in investing c£500 million+ to make our energy distribution networks fit for purpose in a low carbon economy;

- Make sure we have the skills, expertise and knowledge needed to deliver GM's future energy system;

- Recognising that the majority of investments and actions will need to be market and private sector driven, to forge and maintain strong relationships and partnerships with key energy stakeholders, including the Greater Manchester Energy Group;

- Capitalise on, and grow our substantial energy systems R&D and innovation capability.

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A Low Carbon Economy

- A **low carbon economic area** programme of retrofit, skills development and business engagement which aims to deliver the following targets:
  - **An additional 34,800 jobs created** in the built environment sector, giving a total of 68,920 new jobs in the sector
  - **Additional £1.4 billion of GVA generated** against a baseline business as usual forecast of £0.9 billion
  - **Carbon emissions from existing buildings to be reduced** by an additional 1.8 million tonnes, raising the total figure for carbon savings to 6.1 million tonnes

Emissions are cut and GVA is increased

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Investment Programme

RESIDENTIAL	COMMERCIAL	INFRASTRUCTURE	LABORATORY
Phase One (social housing) £102 million Phase Two (social housing) £260 million	Public Sector Estate PV Retrofit £920 million Commercial Centre private Sector retrofit £4 billion Public Sector Estate Town Hall Retrofit £407 million	District Heat Networks Stockport Town Centre £24 million Bury District Heating Network £7.8 million Manchester City Centre Network £98 million Oldham Heat Network £4-10 million Trafford Heat Networks £102 million	Hulme Retrofit £39 million Low Carbon Buses £606 million Low C Emission Zone £17 million Heat Network £86 million Wind Farm £20 million Street Lighting £11 million Smart Grid £16 million

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Investment Programme

- A suite of brochures to stimulate investor discussion

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The next big news

- **Greater Manchester Energy Plan**
  - Launched this Winter
- **Greater Manchester Housing Retrofit Plan**
  - Early 2012
- **Climate Change Implementation Plan**
  - Spring 2012
- Each plan draws upon the actions of a network of partnerships and organisations who are working to deliver a low carbon Economy for Greater Manchester

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Find out more

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