

## Steady State Manchester

### Briefing note on GMCA Climate Change Strategy Consultation.

The consultation link (both download of the Strategy and the consultation survey link) is at: [https://www.greatermanchester-ca.gov.uk/news/article/20/consultation\\_launched\\_as\\_gm\\_sets\\_out\\_plans\\_to\\_cut\\_its\\_carbon\\_emissions](https://www.greatermanchester-ca.gov.uk/news/article/20/consultation_launched_as_gm_sets_out_plans_to_cut_its_carbon_emissions) and will be there until 11 December, 2015.

### Introduction to the strategy.

The Strategy sets an ambitious target of 48% reduction of carbon dioxide equivalent (CO<sub>2</sub>e) emissions reduction by 2020, using 1990 as a baseline. By 2013 (the last year for which figures are available) the fall since 1990 had been 23%. That leaves 25% to go in 7 years, 2 of which have already passed (with unknown results). Put another way, emissions need to fall by an unprecedented 32% from the 2013 figure (i.e. by 5.15Mt CO<sub>2</sub>e, from 16.15mt to 11mt).

Moreover, as the report notes, reductions to date have resulted to a large extent from three one-off shifts:

- a move from coal to gas for electricity generation reducing the carbon intensity of electricity,
- improvements in vehicle technology kept emissions the same despite an increase in demand (maybe this claim will need reviewing following the VW scandal)
- a shift to a knowledge economy reducing industrial emission by 46% (they mean the outsourcing of production to the majority world – so our total emissions are some 50% higher than our territorial ones).

Even if the uncertain national contribution of approximately 50% of the needed reduction is assumed, the challenge is still enormous.

**Fig 4:** GM Carbon Reductions (displayed graphically in Fig.3)

GM Carbon Reductions to 2020	Carbon Emissions (tCO <sub>2</sub> e)	
<b>Reduction required to meet 48% (from 2012)</b>	5.15m	
National policy will deliver	2.54m	2.91m
National policy (with local influence)*	0.38m	
<b>Local Initiatives need to deliver</b>	2.24m	
Estimated impact of existing projects**	0.28m	2.24m
Estimated Impact of potential pipeline	0.27m	
Estimated Unidentified actions	1.68m	

\* Includes projects driven by national policy that require local delivery to accelerate deployment

\*\* includes those which are being delivered or actively being developed by LCPDU and can be delivered by 2020 (these are not all currently fully resourced)

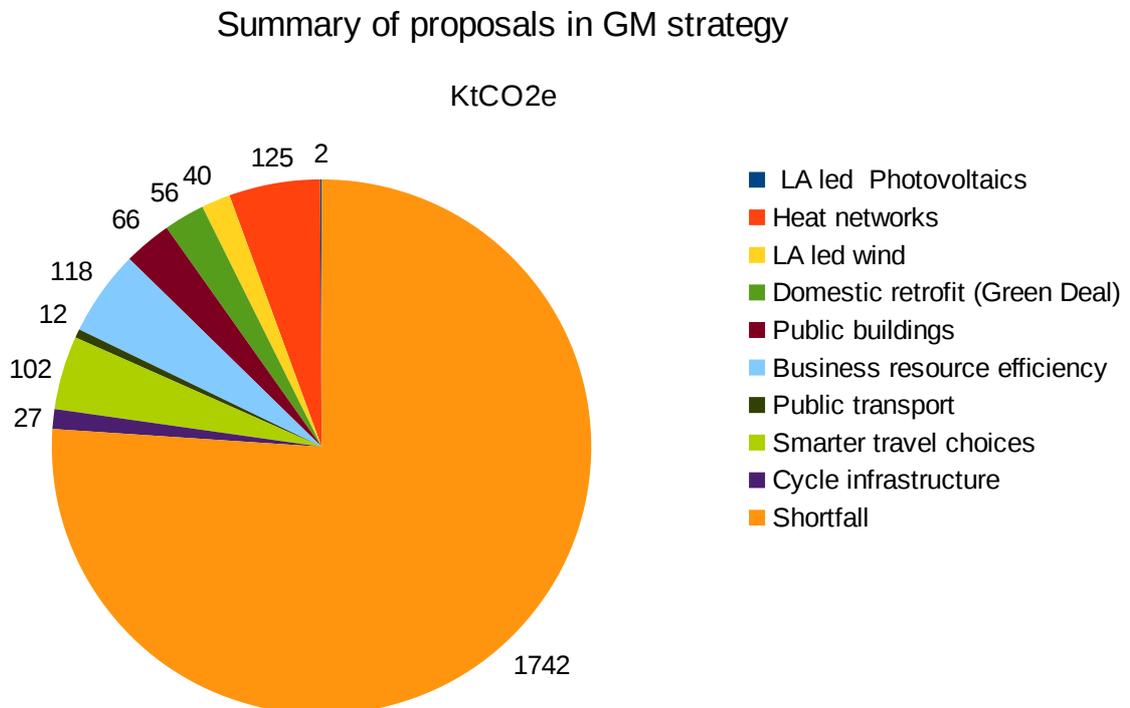
The report identifies several spheres where change should take place: 1) a rapid transition to a sustainable low carbon economy; 2) Our collective carbon emissions will have been reduced by 48%; 3) We will be prepared for and actively adapting to a rapidly changing climate 4) Low emission behaviours will have become embedded into the culture of our organizations and lifestyles. Not strictly part of a climate change strategy, but important nonetheless, it also includes 5) We will support the UK Government in meeting all EU thresholds for key air pollutants at the earliest date to reduce ill-health in Greater Manchester.

With regard to emissions reductions, it identifies the following areas of action, based on the familiar “carbon wedges” analysis:

Existing Pipeline Delivery*	Extended Pipeline Delivery*	Influencing Policy	Encouraging Wider Activities
Deliver identified LA led Photovoltaics (2 KtCO <sub>2</sub> e)	Extended LA led investment in PV (tbc KtCO <sub>2</sub> e)	GM - Consider potential to establish a municipal energy company and supplier licence	Encourage private and public sector PV installation.
Deliver identified Heat Networks/EfW (72 KtCO <sub>2</sub> e)	Expanded Heat Networks/EfW and further feasibility (53 KtCO <sub>2</sub> e)	DECC – to meet UK grid decarbonisation targets	Accelerate delivery of National Grid Innovation Fund
Complete LA lead wind feasibility studies	LA lead investment in viable commercial wind (40 KtCO <sub>2</sub> e)	DECC – to support Urban Community Renewables (eg micro hydro, PV, wind)	Ability to support private sector commercial wind developments
Domestic Retrofit (Green Deal/NEDO) (41 KtCO <sub>2</sub> e)	Continued investment in domestic retrofit (15 KtCO <sub>2</sub> e)	DECC - Greater local determination of national funds for heat and domestic energy efficiency	Further work to encourage energy efficiency/smart heat in social homes – share best practice
Energy Efficiency in Public Buildings – schools (13 KtCO <sub>2</sub> e)	Extend to energy efficiency in identified LA buildings (53 KtCO <sub>2</sub> e)	DCLG - Flexibility to set local standards to encourage high energy performance measures	Energy efficiency in wider public and private sector buildings
Resource efficiency in Business (10 KtCO <sub>2</sub> e)	Double the existing business support for resource efficiency (108 KtCO <sub>2</sub> e)		Carbon literacy, awareness raising and behaviour change initiatives
Public Transport Improvements (12 KtCO <sub>2</sub> e)	Tba as per the Low Emissions Strategy	DfT - Demonstrate the potential for hydrogen energy	Accelerated deployment of electric vehicles, potential for low emission zones
Smarter Travel Choices (102 KtCO <sub>2</sub> e)	Tba as per the Low Emissions Strategy	Tba as per the Low Emissions Strategy	Increased home working
Cycle Infrastructure (27 KtCO <sub>2</sub> e)	Tba as per the Low Emissions Strategy	Tba as per the Low Emissions Strategy	Increased efficient driver training

\* Estimated savings (as at December 2014) from the Low Carbon Wedges analysis – the existing and potential extended pipeline continually evolves over time.

To summarise, and just looking at the local share of the initiatives (i.e. excluding the more than 50% accounted for by, decidedly shaky looking, national government schemes) the picture (SSM's analysis) is like this:



That shortfall is a lot of unidentified actions!

Moreover, if you dig deeper into the report, two things are clear:

1) A lot of words are spent celebrating what has been achieved so far. Yet as we have seen, this is hardly impressive taken against the scale of the problem and taking into account the “one off windfall” emission reductions since 1990.

2) There is little detail as to how these goals will be met.

Let's take domestic retrofit as an example. There is nothing about the number of houses to be retrofitted with insulation, or to what standard, and at what pace. We know from national data<sup>1</sup> that some 28% of houses with cavity walls have no insulation in them, some 30% of lofts are uninsulated and for homes with solid walls more than 90% are not insulated. So far only simple retrofit has been conducted for the majority of homes. This is cheaper but bigger heat and carbon (and eventually cost) savings are possible with “deep retrofit”<sup>2</sup>. The GMCA's low carbon hub itself identified 90% of homes

1 <https://www.gov.uk/government/statistical-data-sets/estimates-of-home-insulation-levels-in-great-britain>  
It will not be feasible to insulate all these walls and lofts. Older houses with narrow cavities will give only small gains so solid wall-type insulation (internal or external cladding) will need to be considered.

2 Jones, P., Lannon, S., & Patterson, J. (2013). Retrofitting existing housing: how far, how much? *Building Research & Information*, 41(5), 532–550. <http://doi.org/10.1080/09613218.2013.807064>

needing to get to energy efficiency grade 'B' (and the rest grade 'C') by 2035<sup>3</sup>: why is this work not used in the strategy? Without such detail it is impossible to assess the proposals. This vagueness is a common factor for all the areas proposed. It is unclear how all this is going to be done.

3) There also seems to be much unwarranted optimism in some of the suggestions. As an illustrative example, the 102kt reduction already “in the pipeline” from “smarter travel choices” appears to relate to the section on p. 21,

#### *Changing Travel Behaviour*

- *Introduce the get me there smartcard system across tram, bus and train*
- *Introduce an integrated fares system across all modes in Greater Manchester*
- *Continue to offer an extensive Travel Choices programme, to encourage people to switch more of their journeys to sustainable transport and to better manage deliveries*
- *Encourage home working through improved broadband use.*

This looks optimistic to say the least. What has been the success from these strategies to date (in terms of measurable carbon reductions)? What is the timescale, the wedge shape, that corresponds to them? What is the risk analysis and management given that there are a lot of dependencies involved? We already know that the implementation of the smartcard (Manchester's Oyster) collapsed (it appears that the company selected had no track record of implementing such a system). Relying on the internet to replace travel is also fraught with problems, not least the energy consumption of the servers required<sup>4</sup>. Moreover there needs to be a target for actual reductions in road traffic volumes. This kind of optimistic and data-free approach runs through the document.

4) Some areas for action are either not identified (e.g. reducing methane emissions) or not categorised and assessed appropriately (e.g. the item on “natural features” on p.19 is highly relevant to preventing GHG seepage and the sequestration potential of improvements to land stewardship needs properly estimating).

The question arises then, ***is this a credible strategy*** especially when more than 2/3 of the reduction strategy has yet to be defined with only 4 years to go?

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3 Greater Manchester Low Carbon Housing retrofit strategy (Draft 2011)  
[http://urbed.coop/sites/default/files/GM\\_%20Low%20Carbon%20Housing\\_Retrofit\\_DiscussionDraft\(1\).pdf](http://urbed.coop/sites/default/files/GM_%20Low%20Carbon%20Housing_Retrofit_DiscussionDraft(1).pdf)

4 <http://bit.ly/1MJB30F>

We could also comment on the economics. Again the section on funding is brief, and indeed this is a topic best with uncertainties due to National government's bizarre policy mix. Given all the optimism about DevoManc, it would make sense to propose powers to control planning that is damaging to the environment and which would result in an increase in CO<sub>2</sub>. In terms of planning it may currently be "illegal" for the council to block planning applications on the grounds of CO<sub>2</sub> emissions, but it is worth asking central government for this, along with devolution of the climate change levy, already proposed. However, given the GMCA's adherence to orthodox, growthist, economics (and frankly suicidal projects like airport expansion), despite the evidence that this is what is driving ever escalating carbon emissions<sup>5</sup>, we would be sceptical that such devolved powers would actually be used wisely.

## **Responding to the consultation**

Bearing all this in mind then, these are the consultation questions with our commentary.

### **1. Do you think the plan is ambitious enough to meet our 2020 targets and set us on course to meet future commitments?**

It is worth saying that the 48% target is ambitious, and compares well to those selected by other areas. But there are major doubts about its feasibility given the present lack of a convincing strategy.

### **2. As it stands, the plan does not include many direct actions required by individuals and organisations, other than GMCA members. Do you think it is important that our plan should cover non Local Authority actions?**

Obviously yes. The local authority only accounts for a small part of emissions. It has a wider leadership role, but both design and implementation of actions requires other actors. Moreover, the public needs properly taking into the confidence of the GMCA – climate change is a problem for all of us and the resource of the people of GM needs to be enrolled in this struggle, not just as consumers whose behaviour needs to change but as politically empowered actors who need to campaign and lobby for fundamental change. The GMCA cannot do this on its own, and nor can it with the usual partners. Upward pressure is needed and this needs to be cultivated.

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5 <http://steadystatemanchester.net/2014/04/13/ipcc-energy-and-economic-growth-are-we-brave-enough/>

**3. Greater Manchester is committed to achieving a 48% reduction in CO2 emissions between 1990 and 2020. It is indirectly committed to a share of the UK's legally binding carbon budgets, and is a signatory to a range of international commitments, which set indirect and direct global targets for 2050 ([Compact of Mayors](#), [Carbon Disclosure Project](#), [Under 2 MoU](#) – after reading the link information, please close the page to return here).**

**We intend to establish new targets for beyond 2020 as part of this Consultation and Plan development process.**

**Which method should we use to establish Greater Manchester's future targets. Please rank, with 1 being your favourite and 5 being your least favourite.**

**Do you think that Greater Manchester's future targets should be based on:**

1	a scientific analysis of Greater Manchester's fair share of a global carbon budget based on maintaining temperature rises within 2 degrees celsius of the 1990 global mean
2	a local socioeconomic proportion of the UK's current targets
3	the ambition of global cities to be seen as leaders on climate change and low emissions
4	a bottom up analysis of the reductions that can be achieved via current and planned projects and initiatives taking place in Greater Manchester
5	an evaluation of the investment and economic opportunities presented by global action on energy security, climate change and air quality improvement.

1 is the only ethically and scientifically justifiable basis. We need to work back from that. However it needs to be based on zero net carbon emissions by 2030 at the latest. 2 degrees is insufficient given new knowledge about the escalating climate crisis.

**4. If you think a different method should be used please explain:**

See above

**5. Should these targets seek to: (select buttons)**

- be minimal, seeking to fulfil our basic obligations to UK and EU targets
- match the ambition of other areas similar to Greater Manchester
- seek to position GM as a leading global city on climate change and low carbon
- an alternative approach eg no targets, please explain below

The third is the only acceptable option.

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