

## Item No. 7

### GM LOCAL ENTERPRISE PARTNERSHIP BOARD

**SUBJECT:** GM CLIMATE CHANGE AND LOW EMISSIONS IMPLEMENTATION PLAN 2016-2020

**DATE:** 12th November 2015

**FROM:** Cllr Sue Derbyshire, GM Low Carbon Hub (Chair)

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### PURPOSE OF REPORT

This report provides an overview of the development of the draft Implementation Plan for the GM Climate Change Strategy and Low Emission Strategies, provides the current version of a Consultation Report and the proposed consultation pathway for comment.

### RECOMMENDATIONS:

It is recommended that the LEP:

- i) Note and comment upon the consultation version of the Implementation Plan (Annex 1)
- ii) Encourage LEP members and other businesses to engage with the consultation process (see Section 4.2) and pledge to undertake your own supportive actions at <https://www.green-growth.org.uk/pledge>
- iii) Note that the funding for the delivery of our low carbon investment ambitions are the subject of a Comprehensive Spending review bid to Government.

### 1. BACKGROUND

The current approved GM Climate Change Strategy runs to 2020, with a key objective to deliver a 48% carbon reduction target by then. A three year Implementation Plan was produced in 2012 which concludes this year; a new Implementation Plan is therefore required to specify our priorities going forward from 2016-2020.

An evaluation of the current Implementation Plan has highlighted how far both the national policy context and GM's experience and knowledge has shifted since the original plan was written in 2012 (Annex 1, page 4). The evaluation also underlined the need for the next iteration of the Implementation Plan to be rooted in our current low carbon 'wedges' work, giving it a strong foundation of evidence, which will enable us to track progress and focus on those interventions which can make a significant contribution to our five objectives (Annex 1, Page 4), particularly our 48% carbon reduction target.

It is proposed that the updated Implementation Plan will be:

- **A document for the whole of GM** - therefore consultation with external stakeholders will be key;

- **Evidence Based** - building on the developing low carbon ‘wedges’ approach and a separate low carbon transport study: it will set out how our 48% carbon emissions reduction target will be achieved;
- **Consensus Building** - Developed in such a way that it can be used for communication about GM’s low carbon agenda and to build consensus;
- **Measurable** – will be used as the framework for annual business planning for the GM Low Carbon Hub.

It has also been previously agreed, by the Low Carbon Hub Board and TfGM, that the scope of the plan should be widened so that it also incorporates the necessary implementation elements of a GM Air Quality Plan. The Air Quality element, which is to be coordinated by TfGM working in partnership with GM public health officers, will help GM to respond most effectively to the public health implications of NOx and particulate emissions, alongside the long-standing carbon programme, in an integrated and efficient manner.

## 2. SUMMARY OF GM LOW CARBON WEDGES APPROACH

It is recognised that there is no single intervention which will reduce emissions sufficiently to meet our targets; it will require a portfolio of action and choices across all aspects of society, with each reducing emissions against a business as usual scenario. As the future is unpredictable, in this plan we have defined one pathway to our target, recognising that it is one of several possibilities, using a Carbon Wedges approach.

The Carbon Wedges approach was originally developed by Princeton University as a way of communicating this concept at a global scale. It has been adapted to the GM level to show that by adding individual ‘wedges’ of carbon reduction measures together, it creates one possible ‘pathway’ to the target (Annex 1, pages 6-8). As GM moves down this pathway, some of the wedges will become easier, some will become harder, and new ones will materialise. Periodically reviewing the wedges ensures that the most cost effective pathway is “the” pathway which is ultimately taken.

The key messages arising from this work can be summarised as:

- The achievement of local carbon targets is significantly dependant on the delivery of national actions, which account for 53% of the target. However, these national policies will only be maximised by utilising local resources from within GM e.g. while GM solar Photovoltaic (PV) installation was 70% of national average, district level variation was significant, between 40% and 135% of the average. National policies will only deliver 2.91mt CO2e of the 5.15mt CO2e deficit, as such Greater Manchester as a whole will have to achieve 2.24mtCO2e through its own actions (see Table 1 below).

Table 1:

GM Carbon Reductions to 2020	Carbon Emissions (tCO <sub>2</sub> e) <sup>1</sup>	
Reduction required to meet 48% (from 2012)	5.15m	
• National policy will deliver	2.54m	2.91m
• National policy (with local influence)*	0.38m	
• Local Initiatives need to deliver	2.24m	

<sup>1</sup> mtCO<sub>2</sub>e = million tonnes of carbon dioxide equivalents

• Estimated impact of existing LA projects**	0.28m	2.24m
• Estimated Impact of potential LA pipeline	0.27m	
• Estimated gap	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 Core Investment Team and can be delivered by 2020 (these are not all currently fully resourced)

- b) The current pipeline of GM Local Authority (LA) projects is estimated to deliver 0.28mt CO<sub>2</sub>e by 2020. There is a further 0.27mt CO<sub>2</sub>e of LA projects which have been identified and are feasible to be delivered by 2020 given appropriate resources. It is currently estimated that the gap between the 2020 target and the known potential project pipeline is 1.68mt CO<sub>2</sub>e. However, it should be noted that there will be initiatives underway which will act towards reducing this gap for which data is either unavailable or we cannot currently estimate, and has not therefore been currently accounted for (e.g. private sector building retrofit and commercial generation schemes).
- c) GM's 48% target was set for GM as a whole, not just the public sector. It cannot be achieved solely by interventions directly within public sector control. To achieve the full 48% target, the introduction of incentives, drivers, initiatives and permissive policy frameworks to stimulate private sector activity, or in traditionally private sector space, will be needed and may deliver greater yields (and potential profits) than restricting activity to areas with direct public sector control. This suggests that GMCA's role in influencing and encouraging local action by others may have a significant role to play in achieving the GM targets.
- d) The variable intensity of the grid will also affect the carbon reduction potential of those technologies connected to it. As the grid decarbonises over time, electrical devices such as heat pumps and electric vehicles will also decarbonise. Simply investing in projects to maximise our chances of achieving the 2020 target may inadvertently lock us in to a 'medium' rather than 'low' carbon future. Investment decisions we make now also need to consider how to achieve the UK's longer term (80% by 2050) targets, rather than solely the quick wins required by 2020. In addition, GM may wish to take a policy stance which encourages Government to meet their commitments for UK grid decarbonisation.
- e) GM can feasibly achieve a 48% carbon reduction target by 2020, however this will require:
- full completion of the **existing** identified GM project pipeline (which is not yet fully resourced) and
  - the delivery of a significant **extended** pipeline of Local Authority lead energy efficiency and energy generation projects **plus**
  - **influencing** national policy and local delivery of national policies; and
  - **encouraging** local non-Local Authority lead projects;
- f) Significant additional resource will also be required to deliver the full 48% target and fill the current gap (1.68 mtCO<sub>2</sub>e). Funding for the delivery of our low carbon investment ambitions are the subject of a Comprehensive Spending Review (CSR) bid to Government. In our CSR proposals, we propose that Government devolve deployment of an escalating proportion of low carbon delivery funds at a rate which matches the city region's primary energy consumption. We would use these funds to develop and deploy local carbon reduction and energy security infrastructure incentives and initiatives. To deliver this programme, Greater Manchester proposes

to create a private sector led, private-public partnership with executive powers, “Energy for Greater Manchester” (working title).

The resulting actions from the Wedges analysis form the basis of the implementation Plan (Annex 1) and can be summarised as follows:

<b>Existing Pipeline*</b>	<b>Extended Pipeline*</b>	<b>Influencing Policy</b>	<b>Encouraging Wider Activities</b>
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 - Meet UK grid decarbonisation targets	Accelerate delivery of National Grid Innovation Fund
Complete LA lead wind feasibility studies	LA lead investment in commercial wind (40 KtCO <sub>2</sub> e)	DECC – 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.

g) In advance of delivering the extended pipeline, further research and feasibility studies will be required to assess the potential for the wider deployment of LA lead PV,

Energy from Waste, LA energy efficiency measures (excl building fabric) and enhanced deployment of electric vehicles. In addition, private sector energy savings from commercial buildings and business operations offer significant opportunities to save carbon, enhance productivity and reduce business risks which are only partly captured under the business support action.

### **3.0 Consultation and Approval Timetable:**

The current version of the Implementation Plan is focused on Local Authority actions and how the Low Carbon Hub can support delivery. However, the targets of the implementation plan will only be achieved through all sectors of GM working together towards agreed objectives and actions.

A consultation exercise is to be carried out to ensure that GM's priorities and targets leading up to 2020 and beyond are agreed by all sectors, to assess what other key stakeholders will contribute towards the plan and to ensure wider awareness and support for the Plan. Consultation will ensure that the commitments are prioritised on the basis of the benefits they bring to finalise a route map leading up to 2020, and begin our planning to 2035.

#### **3.1 Timetable**

25th September 2015:	Draft Consultation Document approved by Combined Authority
2 <sup>nd</sup> October 2015:	Draft Consultation Document to Low Carbon Hub Board
Oct/Nov 2015:	Consultation Process
12 <sup>th</sup> Nov 2015:	Present to LEP
17 <sup>th</sup> November	Low Carbon Hub Workshop
Dec/January 2015:	Analysis of consultation responses and amendments to document
February 2016:	Draft Final Report to CEX
March 2016:	Draft Final Report to WLT/Informal Leaders
1 <sup>st</sup> April 2016:	Draft Final Report to Low Carbon Hub Board
April 2016:	Formal adoption of the Final Report by Combined Authority

#### **3.2 Target Audience for consultation**

From influential policy makers to grass root activists, it is key that all stakeholders are asked for their feedback on the priorities and commitments detailed within the plan and what they may contribute.

The following groups and influencers will be contacted via various methods of communication, to take part in the consultation process starting from mid October:

- Politicians: GM Councillors, North West Members of Parliament
- Local Government and public sector bodies within GM: GM Authorities Housing Companies, Public Health, EA, Natural England etc
- Government departments: e.g. DECC, DEFRA, DFT, BIS, DCLG
- Local Economy: LEP, Manchester Growth Company, Chamber of Commerce, Small Business Service, ProManchester, wider private sector
- Community Groups e.g. Transition Towns
- Key Thematic partners: Transport (e.g. TfGM), Buildings (e.g. Bruntwood), Energy (e.g. Peel), Natural Capital Group, Sustainable Consumption and Production (e.g. UU, Viridor)

#### **3.3 Methods of Engagement**

An online questionnaire has been developed. To ensure a wide reaching process, the following methods of engagement are proposed:

- Launch of consultation with news release distributed via the GMCA Press Officer, containing overview of consultation. Release to detail overview of CCIP, link to fuller article on GMLCH Platform website. Platform article to feature the CCIP as a pdf document and online questionnaire.
- Workshop for up to 100 attendees. All delegates to be identified on their specialist area ensuring a wide spread coverage of all issues and contacted with personal invite by email.
- Attendance at numerous meetings and group sessions to work with existing networks.
- Twitter (@GMLowcarbonhub) to be utilised for launch, reminders and countdown. Tweets to contain link to platform page featuring full document and online questionnaire.
- Personal email to list of (600+) stakeholders and politicians with overview, full CCIP document and link to online questionnaire (or word template with postal return address). Request stakeholders cascade to specific relevant teams within their organisations.

The consultation commenced during the second week of October and will close on 11<sup>th</sup> December. The opportunity to respond to the consultation will be online on Greater Manchester's Low Carbon Hub website:

<http://gmlch.ontheplatform.org.uk/article/greater-manchesters-new-climate-change-plan>

and the online consultation questionnaire can be found at:

<https://www.surveymonkey.com/r/GreaterManchesterClimateChangeStrategyAndImplementationPlan>

The views of the LEP members are important to us. It would be appreciated if LEP members would take some time to complete the online survey response and encourage other businesses to do similarly.

In addition, an online GM pledge has been developed for GM businesses and organisations to sign should they wish. The pledge provides a visible commitment of an organisations intent to take supportive action and provides suggestions, advice and support for businesses that wish to reduce their emissions and save money.

<https://www.green-growth.org.uk/pledge>