### Manchester City Council Report for Resolution

Report to:	Neighbourhoods and Environment Scrutiny Committee – 3 January 2017
Subject:	Manchester City Council Climate Change Action Plan Update
Report of:	Sara Todd, Deputy Chief Executive (Growth and Neighbourhoods)

#### Summary

The Manchester City Council Climate Change Action Plan (CCAP) 2016-20 was approved by the Neighbourhoods and Environment Scrutiny Committee in July 2016. Progress is monitored by an annual report and quarterly updates which provide emissions data and progress updates on the actions stated in the plan. An additional 6 monthly report was requested by the Committee which includes:

- Benchmarking against other local authorities / cities;
- A description of the activities to encourage green procurement; and
- Information on wider partner activity such as engagement with schools and housing providers.

#### Recommendations

It is recommended that the Committee note the content of this report.

#### Wards Affected: All

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#### Background documents (available for public inspection):

The following documents disclose important facts on which the report is based and have been relied upon in preparing the report. Copies of the background documents are available up to 4 years after the date of the meeting. If you would like a copy please contact one of the contact officers above.

MCC Climate Change Action Plan 2016-20 MCC Climate Change Action Plan Update Report: Quarter 2 MCC Carbon Emissions Report: Quarter 2 Manchester: A Certain Future Annual Report 2016. Manchester Climate Change Strategy 2017-50.

# 1.0 Introduction

During the July 2016 meeting of the Neighbourhoods and Environment Scrutiny Committee it was requested that officers return in January 2017 to provide a six monthly update on progress in delivering the Manchester City Council (MCC) CCAP 2016-20. It was also requested that an update was included on:

- Benchmarking against other local authorities / cities;
- A description of the activities to encourage green procurement; and
- Information on wider partner activity such as engagement with schools and housing providers.

The data included in the annual emissions report each summer is only available on an annual basis. As such, it is not possible to report this data on a half yearly basis. Officers also produce quarterly emission and action update reports which are published online using data which is available on a quarterly basis. The quarter 2 2016/17 report was published in mid-November 2016 and the quarter 3 2016/17 report will be published in mid-February 2017. The latest reports can be found here:

http://www.manchester.gov.uk/downloads/download/6097/manchester\_carbon\_reduc tion\_report

http://www.manchester.gov.uk/downloads/download/6300/climate\_change\_action\_pl an\_update\_report

Despite the progress made to meet the Council's carbon reduction target outlined in the CCAP (41% reduction in carbon emission by 2020 based on 209/10 baseline), there is still more to do to tackle climate change and to embed this within the Council's workforce and wider strategies. In recognition of this, a communications and engagement plan is being developed which will aim to encourage and support all staff, residents and businesses in Manchester to play an active role in reducing their own emissions and contributing to the ambitious climate change targets outlined in the CCAP, Manchester Climate Change Strategy 2017-50 and the Our Manchester Strategy. This plan will not solely be driven by carbon emissions, but will focus on the associated issues which are directly affecting the city including health, air quality, economic growth and creating a liveable and green city.

## 2.0 MCC Climate Change Action Plan 2016-20 Update

The Council aims to reduce its direct carbon emissions by 41% by 2020 from a 2009/10 baseline. In summer 2016 the MCC Climate Change Action Plan 2016-20 and Emissions report was published and showed that since 2009/10 the Councils emissions had fallen by 18.1%. The scope of the CCAP includes only carbon emissions that the Council is directly responsible, for such as our operational buildings estate, street lighting and some transport activities including business travel and the waste fleet.

In 2009/10 the majority of the Council's direct emissions came from our built estate (66%) followed by street lighting (22%). A smaller proportion is attributed to transport (9%) and traffic signalling (3%). The below table provides a six monthly update on

the activities in the plan which will have the most impact on reducing the Council's emissions by 41% by 2020.

Area of Activity	Key actions in the CCAP 2016-20	Estimated CO <sub>2</sub> Savings required by 2020	Update
Buildings	<ul> <li>Implement a suite of actions across the MCC operational estate (excluding schools) including: <ul> <li>The implementation of an Estates Transformation Programme</li> <li>Embed carbon savings within the Estate Asset Management Programme.</li> <li>Rationalisation of identified buildings</li> <li>Implementing 'quick win' actions identified in energy audits carried at five buildings;</li> <li>Investigation of the use of a variety of funding opportunities</li> </ul> </li> </ul>	5,900 tonnes (8.1% of 2009/10 baseline)	<ul> <li>A five year Estates Strategy has been approved by Executive Estates Board that sets out the approach to the estate.</li> <li>As part of the Council's rationalisation programme Chorlton District Office has been successfully vacated and work is on track to complete the vacation of Wenlock Way.</li> <li>Progress has been made to implement the 'quick win' actions identified in energy audits. Consideration is being given to incorporate any larger capital works into the Buildings Carbon Reduction Plan.</li> <li>Work has commenced on the Town Hall Extension LED Pilot Project which aims to achieve: <ul> <li>Carbon savings;</li> <li>Cost savings;</li> <li>Maintenance savings; and</li> <li>Improved wellbeing of staff (due to tone of light).</li> </ul> </li> <li>MCC are continuing to work with the GM Core Investment team to identify suitable funding opportunities for the leisure estate.</li> <li>Data gathered from Stock Condition Surveys is being used to inform the development of a Buildings Carbon Reduction Plan which will run in parallel with the Estates Assess</li> </ul>

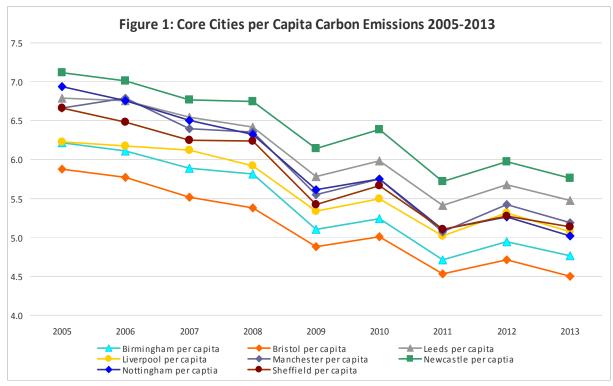
			Management Programme and the Estates Transformation and Rationalisation activity to ensure that the maximum carbon savings are achieved.
Street lighting	To replace all the Manchester street lights with LEDs reducing total carbon emissions by 12%.	8,400 tonnes (11.7% of 2009/10 baseline)	It is anticipated that the contract for the replacement programme will be signed at the end of December in time for a January start of the roll out of the programme. Due to the delays in signing the contract Amey have stated that they will be able to bring forward the leading time for the installation and would look at making up the lost time during delivery.
Civic quarter heat network	To install a heat network in the Civic Quarter connecting the Town Hall, Town Hall Extension, Central Library , Heron House, 1 St Peters, Sq, Manchester Central, the Bridgewater Hall and Manchester Art Gallery reducing total emission by 3.1%.	2,238 tonnes (3.1% of 2009/10 baseline)	<ul> <li>Following review of tender returns, and a recommendation to the Project Board, allowance for internal decision making and due diligence have resulted in a delay to the appointment of a Preferred Bidder. The revised programme is currently: <ul> <li>A preferred bidder expected to be appointed by the end of 2016</li> <li>Financial close by April 2017</li> <li>Start of construction around May 2017</li> <li>Start of operation by Q1 2019</li> </ul> </li> <li>An application has recently been made for Central Government capital grant funding for the project, via the Heat Network Investment Project (<u>https://hnip.salixfinance.co.uk/</u>). Decisions are expected on the outcome of this application in February 2017.</li> </ul>

# 3.0 Benchmarking

Each of the other UK Core Cities has their own version of the MCC CCAP which sets out how they will reduce the direct emissions which are related to their operations. They also have a target to reduce emissions by a set date from a historic baseline, however, these targets vary in their ambition. Although it is difficult to make exact comparisons, MCC's target to reduce emissions by 41% in 2020 from a 2009/10 baseline is one of the most ambitious. A high level list is provided below:

- **Bristol City Council's** original framework aims to reduce carbon dioxide emissions by 40% by 2020 and 80% by 2050 from a 2005 baseline. They have recently adopted a new Climate and Energy Security Framework which sets a target for Bristol to be Carbon Neutral by 2050 from a 2005 baseline.
- **Cardiff Council's** Carbon Management Strategy and Implementation Plan was approved by its Executive in 2008. It committed the Council to achieving a 60% reduction in emissions from Council buildings (excluding housing), street lighting and waste by 2018 from a 2005-06 baseline.
- Nottingham City Council's Carbon Management Plan sets a target of a 31% reduction in carbon emissions from its operations by 2016 from a 2007 baseline.
- **Birmingham City Council** is aiming for a 60% carbon reduction target by 2026 from a 1990 baseline.
- **Liverpool City Council** has adopted a climate change framework to ensure that it achieves its target of 35% carbon emissions reduction by 2024 based on a 2009 baseline.
- **Sheffield City Council** have two agreed targets; a 30% reduction on 2005 levels by 2020; and a 60% reduction on 2005 levels by 2050.
- **Leeds City Council** have committed to reducing CO2 emissions by 80% by 2050 from a 2005 baseline.
- **Newcastle City Council** are committed to a reduction in carbon emissions in excess of 20% by 2020 using a 2005 baseline.
- **Glasgow City Council** has adopted the Scottish Government's climate change objectives from 2009 to reduce carbon emissions by 80% by 2050.

The Core Cities have also developed a set of standard performance data to allow comparisons to be made. Figure 1 (below) shows the per capita carbon emissions for each of the Core Cities from 2005 to 2013. This data is based on the total emissions for each city from all activities including residential and commercial. The overall trend line for each city is very similar and reflects the changes in the UK carbon emissions factors supplied by government each year. These factors are used to convert energy used from a range of activities in to carbon. The factors vary annually depending on the makeup of energy usage in the UK.



Source: Department for Business, Energy and Industrial Strategy, 2015

# 4.0 MCC Green Procurement Policies

In 2008 MCC implemented a sustainable procurement policy to maximise the social, economic and environmental benefits that can be derived from procurement spend. As such, the importance of retaining MCC spend within the local economy was recognised.

Independent research showed that the value of MCC spend within the City Council boundary increased from 51.5% in 2008/09 to 73.6% in 2015/16. Re-spend by these suppliers upon their own Manchester based suppliers and Manchester residents has increased from 25p in every £1 to 43p in every £1. The increase in percentage spend within MCC boundaries and supplier's re-spend within Manchester has associated environmental benefits with goods and services being provided by suppliers with a Manchester base employing local people and sourcing goods locally. Our spend supports over 5000 jobs for Manchester residents through our supply chain.

Building on this success, Manchester worked closely with GMCA to establish a Social Value Policy that provides a standardised and structured approach to the requirements of the Social Value Act across Greater Manchester and ensure that appropriate social value outcomes are incorporated into procurement processes. As such, the Social Value Policy and Framework has been incorporated into MCC procedures and is being utilised by staff and stakeholders. Contracts are now evaluated with a minimum of 20% of the award score allocated to Social Value.

The procurement team has worked closely with members through the Ethical Procurement Task and Finish Group to develop a Manchester City Council Ethical Procurement Policy. The policy which has been approved by full Council promotes ethical trade practices and includes a section on environmental standards and Manchester: A Certain Future climate change action plan.

A launch event is scheduled for 28<sup>th</sup> February 2017 to promote the Ethical Procurement and Social Value policies.

# 5.0 Wider Partner Activity on Climate Change

Wider activity on climate change action across the city is coordinated and deliver by the Manchester A Certain Future (MACF) Steering Group and the Manchester Climate Change Agency (MCCA).

## 5.1 Schools Activity

In summer 2016 MCCA published their Annual Report. The report highlights that there are 176 schools in Manchester and that 91% of these are registered as Eco Schools. Eco schools is an international programme to provide support and information for schools to educate pupils and staff on environmental issues and improve their performance. Of the 176 Manchester Eco Schools: 41 are at bronze level, 49 are at silver level and 13 have a Green Flag award. Table 2 (below) demonstrates the number of Eco Schools in Manchester

## Table 2: Eco Schools in Manchester

Indicator	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2 0 1 5/ 1 6
Percentage of Eco-Schools	82	83	85	82	88	87	9 2
Number of Eco- schools	136	137	142	137	147	153	1 6 1
Green Flag School	5	9	14	15	15	13	1 3

CO<sub>2</sub> emissions from Manchester schools have reduced from 2015 to 2016, with all school emissions down 5% and Academies down 11%.

## Case Study: Parrs Wood High School Solar PV

Parrs Wood high school in Didsbury host one of the country's largest on-roof solar PV arrays. The 250KWsingle installation array is mounted across the school's main roof with the system totalling 961 panels. It is expected that the installation will significantly reduce the school's annual electricity consumption, as well as reducing carbon emissions by 119 tonnes per year.



# 5.2 Housing

In 2014, Greater Manchester received £3.5m from the Department for Energy and Climate Change for the Green Deal Go Early scheme. This scheme delivered home insulation measures to 133 homes in Manchester with 79 of these receiving external wall insulation. On average the GM scheme saw approximately £350per annum savings on resident fuel bills and an estimated carbon/energy saving per annum 12,000 MtCO2e (or 1.2M kg) across GM.

The Carbon Literacy for Registered Providers of Social Housing (CL4RP) Programme has worked with the largest housing associations across GM to roll out a programme of Carbon Literacy training to Registered Provider staff. Several individuals have received carbon literacy training through this programme including staff at Northwards Housing, Great Places Housing Group and Southway Housing.

NEDO (New Energy and Industrial Technology Development Organisation) is a joint GM project with the Japanese Government, technology partners Hitachi and Diakin and GM Partners (GMCA, Northwards Housing, Wigan and Leigh Homes, Six Town Housing, Electricity North West) to install 600 air source heat pumps and demand side reduction technology (DSR) in social homes across Manchester, Wigan and Bury. The project is entering into its last few months and aims to understand the benefits of low carbon heating in social homes (through heat pumps) and the impact of remotely reducing energy use at peak times (through demand response) to the tenant and the financial returns of 'selling' this ability to the Grid. To date there have been approximately 150 installation in Northwards homes in Manchester.

#### Case Study: Northwards Housing

Northwards have carried out a range of energy efficiency improvements to homes through their £300m Home Improvement Programme. Specifically this included:

- External and/or internal insulation to almost 2,500 'hard to treat' homes
- Solar photovoltaic (PV) panels onto 2,334 houses and 21 blocks of flats
- Solar thermal panels onto 7 block of flats
- Ground source heat pumps at 5 locations serving 90 flats
- Air source heat pumps to 153 properties
- 2 communal combined heat and power units serving 213 flats
- 8 micro combined heat and power units to 8 homes (NEA funded pilot)
- 34 homes installed with wireless heating zone controls and flue gas heat recovery systems (NEA funded pilot)

• Low energy lighting to the communal areas of all multi storey blocks (24 in total) and over 200 low rise blocks of flats

In 2014 they achieved their 2020 target of 41% reduction in CO2 since 2005. By March 2016 they estimate that the latest figure to be around 46%. In 2012 Northwards achieved MCC's Environmental Pledge Gold award, and in 2014 they were awarded a Gold award from Sustainable Homes. They have implemented a 'behaviour change' programme and employ a full time Energy Advisor.

This year, Northwards have trained all of their staff to be carbon literate and in November passed as a Platinum Carbon Literacy Organisation.

A selection of their latest targets from their Climate Change Action Plan are listed below:

- Minimum SAP rating for homes of 65 by 2020
- Average SAP rating of 76 by 2020
- 25% of stock to have ecological enhancements by 2020
- 15% reduction in office CO2 emissions by 2020
- Minimum 80% of office waste diverted from landfill by 2020

# 6.0 Zero Carbon by 2050 Commitment

The Our Manchester Strategy 2016-25 was launched in March 2016 and contains the commitment that Manchester will play its full part in limiting its impact on climate change by being on a path to be zero carbon by 2050.

In July 2016, MCC's commitment to be zero carbon by 2050 was outlined in the CCAP 2016-20. Work is now underway to determine a path to 2050.

In November 2016 the Manchester Climate Change Agency published the *Manchester Climate Change Strategy 2017-50* detailing how they will work with partners across the city to meet a range of low carbon objectives outlined in the Our Manchester Strategy including the following:

- Be on a path to being a zero-carbon city by 2050;
- Build well designed, energy-efficient, sustainable and affordable homes to rent and buy;
- Have an integrated, smart and affordable transport system;
- Support the growth of established and emerging business sectors;
- Be a beacon of sustainable design;
- Improve the resource efficiency, carbon and environmental performance of all business sectors;
- Connect higher education institutions with businesses in the city to give graduates a clear route to quality employment or support for an innovative idea;
- Tackle fuel poverty by improving the energy-efficiency of our existing homes, building new homes to the highest standards, and locally generating increasing levels of affordable, low and zero-carbon energy;
- Encourage walking, cycling and public transport use, and continue to invest in the infrastructure this requires;
- Recycle more of our waste;
- Improve the quality of parks, green spaces, rivers and canals, and incorporate more into new developments where appropriate;
- Harness the potential of technology to improve the city's liveability, sustainability and connectivity;
- Be a 100% clean energy city by 2050;
- Continue to encourage the growth of a low carbon culture;
- Increase the proportion of cycling and walking journeys and provide improved infrastructure and signing;
- Use digital technology to transform the way we use energy in order to help reduce energy bills and carbon emissions;
- Ensure that our communities are protected from a changing climate.

For further information regarding citywide activity relating to climate change please visit <u>http://www.manchesterclimate.com/</u>

## 7.0 Communications Plan

Although there is a significant amount of activity in place to reduce emissions and a clear ambition to be zero carbon by 2050, there is still an urgent need to improve communications with Council staff, residents and businesses. A communications plan is currently being developed which seeks to encourage and support the Council and partners, such as the Manchester Climate Change Agency, to do all that that they can to reduce their emissions, promote existing activity and to influence behaviours within the city.

Key messages for inclusion in all proactive communications are:

- Manchester aims to be a carbon neutral city by 2050;
- The Council aims to reduce its direct carbon emissions by 41% by 2020;
- As well as protecting the environment, energy efficiency saves money, helping the Council to invest in the services that residents care about; and
- If Manchester is to meet its 2050 target, we need everyone in the city to play their part, whether by recycling, cutting their energy usage, or choosing lower-carbon transport options where possible.

The Communications and Engagement Plan will be submitted for discussion at a future meeting of Neighbourhoods and Environment Committee.

#### 8.0 Recommendations

It is recommended that Scrutiny note the content of this report.