

## **Manchester City Council Report for Resolution**

**Report to:** Neighbourhoods and Environment Scrutiny Committee - 7 November 2018  
Executive - 14 November 2018

**Subject:** Playing Our Full Part on Climate Change – Updating Manchester’s Commitment

**Report of:** The Deputy Chief Executive

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### **Summary**

This report provides the Committee and Executive with an update on the recent work undertaken by the Tyndall Centre for Climate Research which recommends the establishment of a carbon budget for Manchester. Adopting this carbon budget would mean committing the city to a target of becoming zero carbon by 2038 rather the existing 2050 target. The Manchester Climate Change Board have developed an outline proposal setting out how all partners and residents in the city might play their full part in achieving this ambition and this is included as an appendix to this report.

### **Recommendations**

Neighbourhoods and Environment Scrutiny Committee is invited to comment on the content of this report.

Executive is recommended to:

- a) Adopt the Tyndall Centre’s proposed targets and definition of zero carbon on behalf of the city.
  - b) Commit to developing a draft action plan by March 2019 and a final detailed plan by March 2020 setting out how the city will ensure that it stays within the proposed carbon budget.
  - c) To recognise that by taking urgent action to become a zero carbon city, starting in 2018, we will achieve more benefits for Manchester’s residents and businesses up to 2025 and beyond.
  - d) Work with partners to ensure that Manchester accelerates its efforts to encourage all residents, businesses and other stakeholders to take action on climate change, starting in 2018.
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**Wards Affected:** All

<b>Manchester Strategy outcomes</b>	<b>Summary of how this report aligns to the OMS</b>
A thriving and sustainable city: supporting a diverse and distinctive economy that creates	The transition to a zero carbon city will help the city’s economy become more sustainable and will generate jobs within the low carbon energy and

jobs and opportunities	goods sector. This will support the implementation of Manchester's emerging Local Industrial Strategy.
A highly skilled city: world class and home grown talent sustaining the city's economic success	
A progressive and equitable city: making a positive contribution by unlocking the potential of our communities	Transitioning to a zero carbon city can help to tackle fuel poverty by reducing energy bills. Health outcomes will also be improved through the promotion of more sustainable modes of transport.
A liveable and low carbon city: a destination of choice to live, visit, work	Becoming a zero carbon city will make the city a more attractive place for people to live, work, visit and study.
A connected city: world class infrastructure and connectivity to drive growth	A zero carbon transport system would create a world class business environment to drive sustainable economic growth.

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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.

*Playing Our Full Part: How Manchester's Residents and Businesses can benefit from Ambitious Action on Climate Change 2018*  
*Manchester Climate Change Strategy 2017-50*  
*Manchester Climate Change Strategy Implementation Plan 2017-22*  
*Manchester: A Certain Future Annual Report 2017*

## **1.0 Background**

- 1.1 There is increasing global evidence of the impacts that global warming is already having on the world's climate. Data from the U.S 's National Aeronautics and Space Administration (NASA) and National Oceanic and Atmospheric Administration (NOAA) highlights that:
  - The five warmest years in the global record (which dates back 138 years) have all come in the 2010s;
  - The 10 warmest years on record have all come since 1998;
  - The 20 warmest years on record have all come since 1995.
- 1.2 The evidence points to the fact that the temperature rises that have occurred to date are giving rise to more extreme weather events across the globe. In the UK the predictions point to an increasing likelihood of wetter winters and warmer summers. At a global scale, there is a danger of increasing incidences of water and food shortages as well as flooding in coastal regions as ice sheets melt and global sea levels rise, and more frequent and extreme storms and hurricanes. While direct impacts may be more extreme in other parts of the world, Manchester will be affected by these global impacts and the increasing insecurity that they may cause. There is therefore an urgent need for all cities to consider what they need to do to play their full part in addressing climate change.
- 1.3 In 2015, the Manchester Climate Change Agency (MCCA) was established to support, encourage and enable organisations and individuals in Manchester to contribute towards delivering the city's commitments on climate change. The Agency is an enabling organisation whose priorities are focused on adding value to existing climate change activities in the city, in particular through the development of new projects and funding bids.
- 1.4 The Our Manchester Strategy sets out the vision for Manchester to "be in the top flight of world-class cities by 2025" and commits the city to "playing our full part in limiting the impacts of climate change and by 2025 will be on a path to being a zero carbon city by 2050".
- 1.5 The Council supports the MCCA and the Manchester Climate Change Board (MCCB) in taking forward work to address climate change and their work with partners across the city. The MCCB is proposing to update its commitment to carbon reduction in the context of achieving the "Our Manchester" objectives and is asking the Council to endorse these ambitious new targets.

## **2.0 Citywide Targets**

- 2.1 Over the last year, the MCCA has been working with the world renowned Tyndall Centre for Climate Research at the University of Manchester to understand what action Manchester needs to take in order to meet its obligations under the Paris Agreement which was adopted during COP21 in 2015. This work has resulted in a recommendation that the city as a whole adopts new targets which are outlined below;

- Adopt a carbon budget and emit only a maximum of 15 million tonnes CO<sub>2</sub> for the period 2018-2100;
- Commit to a 13% year-on-year reduction in citywide CO<sub>2</sub> emissions from 2018 to achieve this carbon budget; and
- For the city to be zero carbon by 2038.

2.2 The proposed definition of zero carbon is based on the Tyndall Centre's recommendation and includes carbon dioxide emission from the energy system only i.e. the gas, electricity and liquid fuels that are used to power and heat homes and businesses and to transport people around the city. Emissions from flights from Manchester Airport are not included in the definition of zero carbon. This is because the Tyndall Centre analysis allocates aviation emissions to a UK-wide aviation carbon budget, rather than allocating emissions to specific local authority areas.

2.3 To become a "zero carbon" city by 2038, it is assumed that all sectors will need to reduce emissions by at least 95% from current levels, with the residual 5% being reduced over the period 2038 to 2100. This is due to the difficulty in making further marginal reductions at these reduced levels.

2.4 Leading scientific bodies have calculated limits or 'budgets' for the level of carbon dioxide that can be emitted globally, to keep within various ranges of temperature change compared to pre-industrial levels. The Tyndall Centre have transposed a global carbon budget that is "likely" (with 66% to 100% confidence) to stay below 2°C temperature change as agreed in the Paris Agreement. A methodology has been designed and applied to scale down this 'carbon budget' to the UK city regions using a range of apportionment regimes that are ultimately responsible for defining the date by which carbon neutrality could be achieved. Based on this, the recommended carbon budget for the Manchester City Council's local authority boundary equates to 15MtCO<sub>2</sub>. More information on the Tyndall Centre's Suggest referencing the Tyndall Centre's methodology can be found on the Manchester Climate Change website: [www.manchesterclimate.com/plan](http://www.manchesterclimate.com/plan)

2.5 If emissions remained at current levels, there would be less than 7 years of budget remaining. This type of budgeting approach is also referred to as a 'Science Based Target' and is gaining traction with other cities and corporate organisations. At present, there are 20 other cities that are part of the Carbon Neutral Cities Alliance (London being the only other UK city at present), demonstrating that others are adopting similar approaches.

### **3.0 The Council's Role**

3.1 The Council has a number of important roles to play to support the transition to a zero carbon city. The Council's direct CO<sub>2</sub> emissions make up approximately 3% of the city's total with the operational building estate making up nearly two thirds. A significant amount of work has already been undertaken via the rationalisation of the Council's operational estate, energy efficient improvements to Council building, a full LED street lighting replacement programme and the development of a Civic Quarter Heat

Network. The latest data for 2017/18 showed that the Council's total direct CO<sub>2</sub> emissions had reduced by 33.8% since 2009/10, putting the Council on target for a 41% reduction by 2020. An updated version of the Council's Climate Change Action Plan will need to be developed to set out the actions that are required to significantly reduce these emissions.

3.2 The Council also has a significant leadership and influencing role across a number of thematic area including the following:

- Industry and Commercial: Supporting schools and businesses to reduce their emissions wherever possible, developing planning policy, influencing contractors through procurement and commissioning.
- Domestic: Partnership working with social housing providers across the city to improve social housing properties, working with the Greater Manchester Combined Authority (GMCA) to develop energy efficiency programmes to support private renters and owner occupiers.
- Transport: Partnership working with TfGM, continuing to promote modal shift from the private car to public transport, cycling and walking by investing in sustainable transport infrastructure, ensuring new developments are close to transport nodes.

#### 4.0 Anticipated Timescales

4.1 The anticipated timescale for this piece of work are as follows:

Action	Timescale
Council endorses the MCCB proposals on behalf of the city, committing the city to revised targets in line with scientific evidence.	November 2018
Citywide action plan/call to action drafted with all partners setting out what needs to be achieved and a draft action plan for staying within the carbon budget and reaching zero carbon by 2038.	Nov 2018 – February 2019
Draft citywide plan adopted by the Council on behalf of the city.	March 2019
Final plan developed with all partners setting out more detailed plans for implementation.	April 2019 – February 2020
Final citywide plan adopted by the Council on behalf of the city.	March 2020
Implementation of the plan.	April 2020 – December 2038

#### 5.0 Conclusion and recommendations

5.1 The MCCB have proposed that the Council adopt the Tyndall Centre's recommendations and include them as part of the Our Manchester and Manchester City Council Policy Framework. The scale of the challenge is significant, but it is clear that a more ambitious target and delivery plan is required for the city to play its full role in limiting the impact of climate change. It is also clear that there are many wider socio-economic benefits of

transitioning to a zero carbon city which will help to deliver the ambition set out in the Our Manchester Strategy.

- 5.2 While the Council has an important role in providing leadership, in reducing its direct emissions and in setting a supportive policy framework, ultimately meeting the revised target will require action and behavioural change by residents, businesses and institutions across the city. The development of the final plan will therefore require engagement from everyone in Manchester if we are truly to 'play our full part'.
- 5.3 The report attached in Appendix 1 sets out some more information about the different agencies and sectors that have already begun to work together with their peers to a make commitment to becoming zero carbon.
- 5.4 The recommendations are listed at the front of this report.