

Manchester City Council Report for Information

Report to: Executive – 12 February 2020

Subject: Manchester Climate Change Update

Report of: Deputy Chief Executive and City Treasurer

Summary

In November 2018, the Council's Executive agreed to establish a science-based carbon reduction target for Manchester, which required the city as a whole to adopt a carbon budget of 15 million tonnes of CO₂ between 2018 and 2100. This would require a year-on-year reduction of at least 13%, emissions to be halved within five years, and lead to the city becoming zero carbon by 2038 at the latest.

As such, the Manchester Climate Change Board (MCCB), with the support of Anthesis, developed a guide to support organisations in Manchester to play their full part in achieving this commitment alongside a draft zero carbon framework. The Board also worked with partner organisations, including the Council, to develop a draft zero carbon action plan, which was approved by the Council's Executive in March 2019.

The Manchester Climate Change Framework 2020-25 is scheduled for publication on 28th February 2020. The Council's Executive will be asked to formally adopt the target and endorse the framework on behalf of the city on 11 March 2020. The Council has also committed to producing its own Action Plan which will be considered for approval at the same meeting.

This report provides the Executive with an update on the Tyndall Centre for Climate Change Research review of targets and an update on the development of a city-wide Manchester Climate Change Framework 2020-25.

Recommendations

The Executive are asked to note the citywide progress and the summary of the Tyndall Centre for Climate Change Research review of targets.

Wards Affected: All

Environmental Impact Assessment - the impact of the issues addressed in this report on achieving the zero-carbon target for the city

The development of a new Manchester Climate Change Framework 2020-25 will set out the city's priorities for addressing climate change. The Council has a vital leadership role within the city and has supported the establishment of the Manchester
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Climate Change Agency and Partnership to provide additional capacity and support to the delivery of this agenda.

Manchester Strategy outcomes	Summary of how this report aligns to the OMS
A thriving and sustainable city: supporting a diverse and distinctive economy that creates jobs and opportunities	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 goods sector. This will support the implementation of the Our Manchester Industrial Strategy.
A highly skilled city: world class and home grown talent sustaining the city's economic success	Manchester is one a small number of UK cities that have agreed a science based target and is leading the way in transitioning to a zero carbon city. It is envisaged that this may give the city opportunities in the green technology and services sector.
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 and improved air quality.
A liveable and low carbon city: a destination of choice to live, visit, work	Becoming a zero carbon city can help to 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.

Full details are in the body of the report, along with any implications for

- Equal Opportunities Policy
- Risk Management
- Legal Considerations

Financial Consequences – Revenue

The revenue implications arising from the Manchester Climate Change Framework 2020-25 and the Council's new five-year Climate Change Action Plan will be addressed as part of the revenue budget setting process each year from 2020/21.

Financial Consequences – Capital

The City Council's capital strategy from 2020/21 will set out the investments needed to meet the requirements of the new plan as it is developed.

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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.

Climate Change Sub Group 23 January 2020, Tyndall Centre for Climate Change Research Presentations

Climate Change Suite of Reports, Neighbourhoods and Environment Scrutiny Committee 5 February 2020

Manchester Climate Change Annual Report 2019

Playing Our Full Part: How Manchester's Residents and Businesses can benefit from Ambitious Action on Climate Change 2018

Manchester Zero Carbon 2038, Manchester City Council's Commitment, March 2019

1.0 Introduction

- 1.1 The purpose of this report is to provide an update on the review of Manchester's science-based climate change objectives and targets, and the development of the Manchester Climate Change Framework 2020-25.

2.0 Background

- 2.1 Manchester has been listening to the science since the development of the city's first climate change strategy in 2009. The target to reduce Manchester's CO₂ emissions by 41% by 2020, from 2005 levels, was based on recommendations by the Tyndall Centre for Climate Change Research at the University of Manchester (the Tyndall Centre)
- 2.2 In June 2018 Manchester Climate Change Agency (the Agency) and the Manchester Climate Change Partnership (the Partnership) commissioned the Tyndall Centre to recommend targets to further define the city's commitment to 'play its full part in limiting the impacts of climate change', as set out in the Our Manchester Strategy.
- 2.3 Following publication at the Manchester Climate Change Conference in July 2018, the targets were proposed to Manchester City Council in October 2018, as part of the 'Playing Our Full Proposal'¹, developed by the Climate Change Agency and Partnership.
- 2.4 In November 2018 Manchester City Council formally adopted the targets, on behalf of the city.
- 2.5 In February 2019 the Climate Change Agency and Partnership published a Draft Zero Carbon Framework 2020-38², to set out an outline approach for meeting the new targets. In March 2019 Manchester City Council formally endorsed the Draft Framework, with a view to considering a final version by March 2020.

3.0 Targets

- 3.1 The Council has played a key leadership role within the city for a decade and established a partnership-based approach to climate action which started with the creation of the MACF Steering Group in 2010. This approach recognises the need for everyone in the city to be mobilised to play their full part in tackling climate change. Following the publication of the Draft Framework in February 2019, the Agency established a 'Manchester Carbon Reduction Advisory Group', to support the development of the final version of the Framework.
- 3.2 The group recognised the need for an early review of the city's targets, to take into account the publication of new scientific evidence (in particular the

¹ <http://www.manchesterclimate.com/content/science-based-targets>

² <http://www.manchesterclimate.com/content/framework-2020-2038>

Intergovernmental Panel on Climate Change's Special Report on 1.5°C) and the latest international best practice on city climate action. This need was bolstered by Manchester City Council's declaration of a Climate Emergency in July 2019.

3.3 A brief for an additional piece of work to address elements of the Climate Emergency began to be scoped in August 2019 and Manchester City Council subsequently agreed to fund this research. In November 2019 the Agency commissioned the Tyndall Centre to undertake a review of the city's climate change targets. A copy of the full brief is available from <http://www.manchesterclimate.com/targets-2020>. In summary the brief sets out the need to address:

- 'Direct' / 'energy-only' CO₂ emissions from the energy used in the city's buildings and energy
- 'Indirect' / 'consumption-based' CO₂ emissions embedded in the products and services we consume in the city (e.g. food, construction materials, electronics, clothes, etc)
- Aviation emissions
- A target-setting and reporting methodology for Manchester organisations and sectors

3.4 The final report is scheduled for completion by 21st February 2020.

3.5 The Tyndall Centre's work to date was presented to the City Council's Climate Change Sub-group on 23rd January 2020, in relation to the 'direct' and 'aviation' elements of the brief. The full presentations are available from the below link³.

Direct CO₂ emissions: draft recommendations

3.6 As set out in the presentation from Dr Chris Jones on 23rd January 2020, the Tyndall Centre's work to date has identified the following draft recommendations for Manchester:

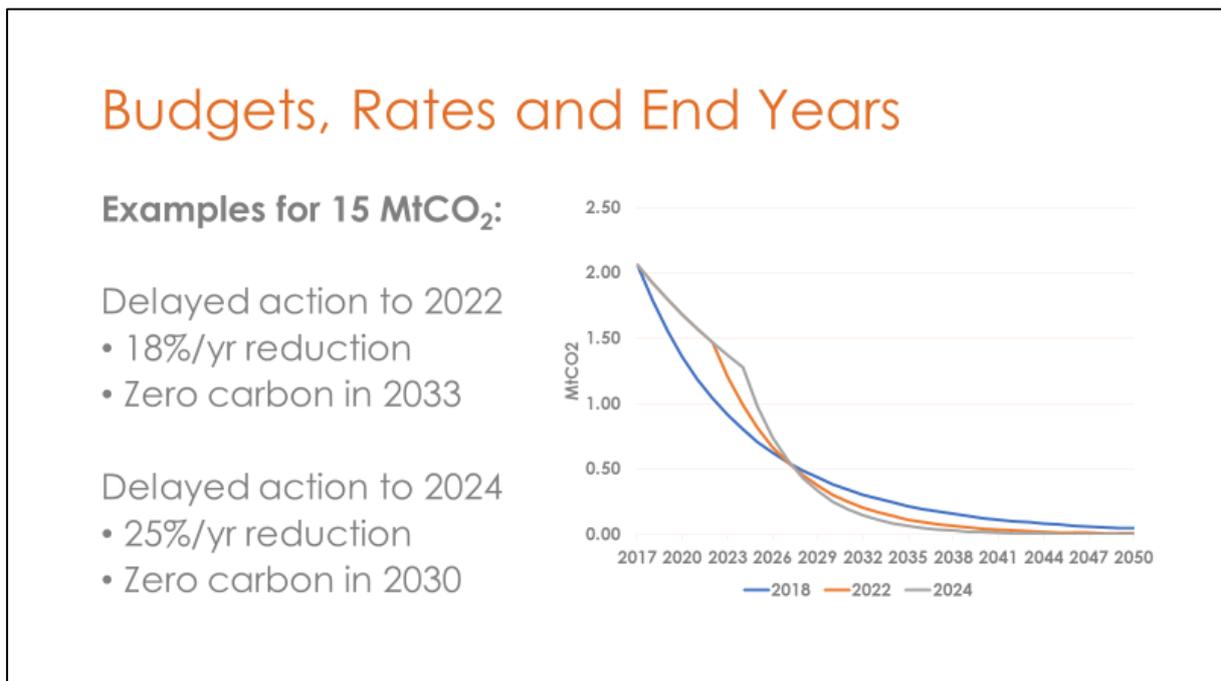
- 1) Retain the existing 15 million tonne CO₂ carbon budget for 2018-2100
- 2) Note that the updated carbon budget approach based on the latest scientific synthesis report by the IPCC would allow an increase in the carbon budget to 18 million tonnes CO₂ but that by retaining the 15 million tonne budget this shows ambition and leadership
- 3) Focus on immediate action to achieve a minimum reduction rate of 13% per annum and meeting interim (five-year) carbon budgets

³ <http://www.manchesterclimate.com/news/2020/01/manchester-city-council-climate-change-sub-group-23rd-january-2020>

- 4) Note that if the city does not reduce emissions by 13% per annum, an increased rate will be required from 2020 in order to stay within budget. (See 3.7 below for further details).
- 5) Carbon budgets should be revisited in five years or in response to a new scientific synthesis report

3.7 It should be noted that the 'zero carbon date' is defined as the date at which Manchester has 5% of its 15 million tonne budget remaining, to allow for small but difficult to avoid sources through to the end of the century e.g. backup generators. Manchester's zero carbon date is a function of the rate of decarbonisation i.e. how much of the carbon budget is being 'spent' year-on-year. Manchester's average rate of decarbonisation (2013 to 2017) is 7% per annum – largely caused by decarbonisation of the national grid. The below graph provides indicative examples showing the impact of delaying the year from which Manchester increases the necessary rate of decarbonisation.

Figure 1: Tyndall Centre graph showing impact of delayed action



Aviation emissions: areas identified for consideration

- 3.8 As set out in the presentation from Dr John Broderick on 23rd January 2020, the Tyndall Centre's work to date has identified the following areas for Manchester to consider:
- 1) To note that aircraft emissions can't be overlooked – additional action is required to meet the Paris Agreement 'well below 2°C' commitment
 - 2) UK aviation emissions need to fit within a Paris-compliant national pathway. Noting that the Tyndall Centre's recommended carbon budget

includes 1,262 million tonnes CO₂ for aviation from 2018-2100, versus 1,705 million tonnes based on current UK Government policy forecasts.

- 3) Survey data makes it possible to monitor and report Manchester residents' flights from UK airports, including from Manchester Airport
- 4) A method for monitoring and reporting flights taken by Manchester businesses could be developed. To be aware of potential double counting with residents' flights.
- 5) Manchester City Council and Manchester Airport should work with UK Government to ensure a Paris-compliant aviation strategy for the UK as technological change alone is insufficient.
- 6) Could Manchester Airport become a pioneer organisation (as part of the Manchester Climate Change Partnership) for managing the impact of its ground operations?

3.9 The final Tyndall Centre report on aviation will be completed by 21st February 2020.

Indirect / consumption-based CO₂ emissions

3.10 Work is at an early stage on reviewing and recommending objectives and targets for Manchester's indirect / consumption-based CO₂ emissions.

3.11 It should be noted that this topic and the associated data is less well developed than for direct and aviation emissions. As such it is expected that higher level objectives and/or targets will be recommended at this stage than for direct and aviation emissions.

3.12 The final report will be completed by 21st February 2020.

Target-setting and reporting methodology for organisations and sectors

3.13 A workshop has been organised for 5th February 2020 to review potential options to help organisations and sectors to set targets in line with city-level targets, and report progress. The workshop is being held for members of the Manchester Climate Change Partnership.

4.0 Manchester Climate Change Framework 2020-25

4.1 The Framework is being produced by the Manchester Climate Change Partnership and Agency, setting out their recommended approach for Manchester to meet its targets.

4.2 Since the publication of the Draft Manchester Zero Carbon Framework 2020-38, there have been three key developments:

- Targets review – as above

- Timescales and urgency – the Partnership and Agency have chosen to focus on the next five years, 2020-25, seeking to emphasise the point that urgent action is needed
 - Adaptation and resilience to the changing climate – this has been identified as an additional objective, broadening the scope of the Framework from carbon reduction
- 4.3 The Framework is currently in development and will be published by the Partnership and Agency on 28th February 2020. The following provides an outline of the document:
- 4.4 Introduction from the Manchester Climate Change Partnership & Agency
- Setting out that ambitious climate action now needs to form part of our everyday lifestyles, business activities and the city’s future plans
 - Manchester has led and pioneered developments that have changed the world before now; we have the opportunity to do it again with a new zero carbon revolution
- 4.5 Approach to Developing This Framework
- Two key principles: our targets are set based on the latest science, and; we need all organisations and individuals to play their part in helping us to meet them, working with support from Manchester City Council, Greater Manchester Combined Authority and UK Government
 - Independent advice and guidance: the Framework has been informed by input from a range of groups and organisations, including the Manchester Carbon Reduction Advisory Group, CDP, the Global Covenant of Mayors, and WWF’s One Planet City initiative.
- 4.6 Our Vision
- Setting out our vision to become a thriving, zero carbon, climate resilient city, including the creation of good jobs, improved health for our residents, and successful, socially responsible businesses
- 4.7 Our Commitments / Objectives:
- Zero carbon
 - Climate adaptation and resilience
 - Health and wellbeing
 - Good jobs and successful businesses
- 4.8 Urgent Actions to Meet Our Commitments:
- Urgent Actions for every resident and organisation: based around a list of 15 actions⁴
 - Urgent Actions for Manchester City Council, Greater Manchester Combined Authority, and UK Government: to unblock the barriers that are preventing/limiting the city’s residents and organisations from realising their full potential to act
 - Urgent Actions for Manchester Climate Change Partnership and Agency: driving forward and facilitating the delivery of the Framework, including

⁴ <http://www.manchesterclimate.com/15-actions>

focus on working with partners to engage residents and organisations across the city

4.10 Governance and Partnerships

- Describing Manchester's devolved approach to the development and implementation of climate change policy, setting out the role of the Climate Change Partnership and Agency in driving forward and facilitating citywide action, and the position of the Partnership and Agency within the wider Our Manchester structure

4.11 Measuring and Reporting Progress

- Honest and transparent reporting of progress, good and bad
- Annual reports

4.12 Keeping Our Target and Framework Up to Date

- The need for updates will be informed by the recommendations of the city's expert partners and advisors, updates to the latest climate science, the city's performance against its targets, changes in local and national policy, and other key developments.

4.13 Working with Other Cities

- Recognising the potential to accelerate action in Manchester (and other cities) by sharing our challenges and priorities

4.14 Get Involved and Further Information

- Encouraging readers to visit the list of '15 Actions' the Partnership and Agency are promoting for all residents and organisations to take – these will also be promoted in conjunction with Manchester City Council
- Providing the Agency's contact details

5.0 Next Steps

5.1 The review of targets and the Manchester Climate Change Framework 2020-25 are being delivered according to the following timetable:

- 21st November 2019 – update to Manchester Climate Change Partnership
- November 2019 – Tyndall Centre commissioned
- 16th January 2020 – update to Our Manchester Forum
- 23rd January 2020 – update to Manchester City Council Climate Change Sub-group
- 23rd January 2020 – update to Manchester Climate Change Partnership
- 5th February 2020 – update to Manchester City Council Neighbourhoods and Environment Scrutiny Committee

- 12th February 2020 – update to Manchester City Council Executive
- 21st February 2020 – Tyndall Centre review complete
- 28th February 2020 – Manchester Climate Change Framework 2020-25 published by Manchester Climate Change Partnership and Agency
- 11th March 2020 – refreshed/new targets formally adopted by Manchester City Council’s Executive, on behalf of the city, and; Framework 2020-25 endorsed by Manchester City Council’s Executive

6.0 Recommendations

- 6.1 The Executive are asked to note the citywide progress and the summary of the Tyndall Centre for Climate Change Research review of targets.