

**Manchester City Council
Report for Information**

Report to: Environment and Climate Change Scrutiny Committee – 21 July 2022

Subject: Manchester Climate Change Framework (2020–25): 2022 Update

Report of: Manchester Climate Change Partnership and Agency

Summary

This report provides the key contents of the 2022 Update to the Manchester Climate Change Framework (2020–2025).

Recommendations

The Scrutiny Committee is recommended to consider and make comments on the content of the report.

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 Manchester Climate Change Framework 2020-25 is the city's high-level strategy for tackling climate change. It sets out how Manchester will 'play its full part in limiting the impacts of climate change', a commitment in the Our Manchester Strategy 2016-25. The Framework's key aim is for "Manchester to play its full part in limiting the impacts of climate change and create a healthy, green, socially just city where everyone can thrive."
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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 Climate Change Framework has the core objective: "To ensure that Manchester establishes an inclusive, zero carbon and climate resilient economy where everyone can benefit from playing an active role in decarbonising and adapting the city to the changing climate.
A highly skilled city: world class and home-grown talent sustaining the city's economic success	The Climate Change Framework notes: "By 2025 Manchester will be a key player in the global zero carbon economy, recognised as one of the best places in the world to innovate, invest and roll-out new solutions to climate change. Manchester businesses will be rewarded for their commitment to climate action by saving money, attracting talented workers and exporting their products and expertise across the UK and internationally."
A progressive and equitable city: making a positive contribution by unlocking the potential of our communities	The Climate Change Framework has the core objective: "To ensure that Manchester establishes an inclusive, zero carbon and climate resilient economy where everyone can benefit from playing an active role in decarbonising and adapting the city to the changing climate.
A liveable and low carbon city: a destination of choice to live, visit, work	The Climate Change Framework notes: "By 2025 Manchester residents will have cleaner air, be walking and cycling more, be living in more energy efficient homes, have access to high quality green spaces in their neighbourhoods, and be securing good, well-paid jobs in socially and environmentally responsible Manchester businesses."
A connected city: world class infrastructure and connectivity to drive growth	The Climate Change Framework has the core objective: "To ensure that Manchester establishes an inclusive, zero carbon and climate resilient economy where everyone can benefit from playing an active role in decarbonising and adapting the city to the changing climate.

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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.

Manchester Climate Change Framework 2020-2025:
<https://www.manchesterclimate.com/framework-2020-25>

UK Climate Investment Commission Report:
<https://cp.catapult.org.uk/news/uk-cities-climate-investment-commission-report/>

'Incorporating Food into Manchester's Climate Change Response' by the University of Manchester's Sustainable Consumption Institute:
https://www.manchesterclimate.com/sites/default/files/Sustainable%20Food%20Mission_Part%201_Final_1.pdf

'Manchester Climate Risk – A Framework for Understanding Hazards and Vulnerability':
<https://www.manchesterclimate.com/sites/default/files/Climate%20vulnerability%20framework.pdf>

Report on health inequalities and climate to the Health and Wellbeing Being Board:
<https://democracy.manchester.gov.uk/documents/s29934/Manchester%20Climate%20Change%20Framework%2025-10-2021.pdf>

Report on food by the Manchester Food Board:
<https://democracy.manchester.gov.uk/documents/s31397/Manchester%20Food%20Board.pdf>

Manchester Climate Assembly Mandate:
https://res.cloudinary.com/commonplace-digital/limited/image/upload/v1633687544/projects/zerocarbonmanchester/workshops/Mandate_Upload.pdf

Manchester Youth Board Manifesto:
https://www.manchesterclimate.com/sites/default/files/MCCYB%20Manifesto_0.pdf

1.0 Introduction

- 1.1 The Manchester Climate Change Partnership (MCCP) and Agency (MCCA) are responsible for setting and maintaining Manchester’s strategy for tackling the climate emergency.
- 1.2 The Manchester Climate Change Framework (2020-25) is the city's high-level strategy for tackling climate change. The Framework’s key aim is for “Manchester to play its full part in limiting the impacts of climate change and create a healthy, green, socially just city where everyone can thrive”. This is aligned to a key commitment in the Our Manchester Strategy 2016-25.
- 1.3 The Framework is being updated to ensure it remains responsive to a changing city and increasingly urgent climate emergency, and to provide more information on the scale of action needed for the city to stay within its carbon budgets. The city is not currently on track to do this.

2.0 Background

- 2.1 Manchester’s Climate Change Framework 2020-25 (the Framework) sets a science-based target for the city to reach zero carbon emissions by 2038 and sets a total carbon budget for our direct emissions of 15m tCO₂ for the period 2018-2100. The first milestone on this pathway is for the city to reduce its direct emissions by 50% by 2025. See graph and table below.

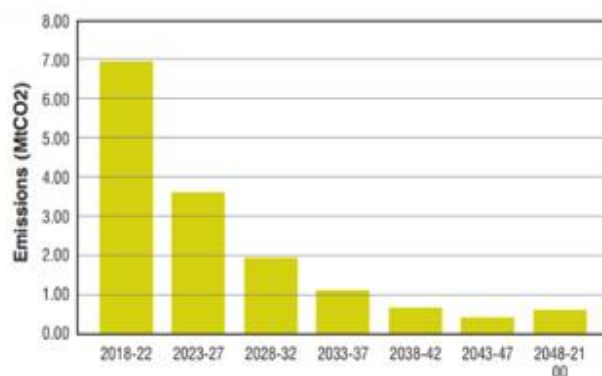


Figure 4: Emissions projections consistent with the 15 MtCO₂ budget – starting from common year (2017)

Time Period	CO ₂ budget (MtCO ₂)
2018-22	6.93
2023-27	3.59
2028-32	1.95
2033-37	1.10
2038-42	0.64
2043-47	0.38
2048-2100	0.59
Total	15.17

Table 2: Manchester’s 15 MtCO₂ budget by time period

- 2.2 The budget was set with support from the Tyndall Centre for Climate Change at Manchester University and includes direct, energy-related emissions in the city’s carbon budget. These are sometimes described as territorial emissions. Indirect emissions are not included in the budget but are addressed by the Framework.
- 2.3 The Framework identifies four headline objectives for the city to tackle:
 - Staying within our carbon budgets
 - Climate adaptation and resilience
 - Health and wellbeing
 - Inclusive, zero carbon and climate resilient economy

2.4 It also identifies six priority areas:

- Buildings (existing and new)
- Renewable energy
- Transport and flying
- Food
- The things we buy and throw away
- Green infrastructure and nature-based solutions

2.5 It sets out a range of broad city-level actions against each of those six priority areas, for example to “improve the energy efficiency of our buildings as far as possible to reduce our demand for gas” and defines 15 actions that every resident and organisation needs to take to help meet the challenge.

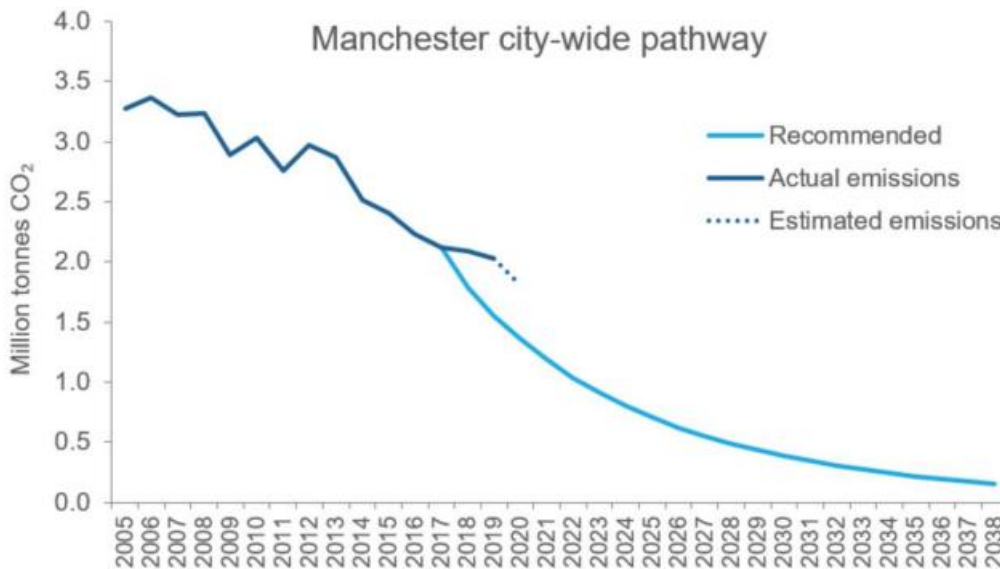
2.6 Much work has been undertaken by Manchester Climate Change Agency and Partnership to support delivery of the Framework and meeting its targets. This Includes:

- developing a Zero Carbon New Build standard addressing both
- operational and embodied energy which has been shared with the Council as part of the development of the new Local Plan
- delivering the In Our Nature programme engaging communities across Manchester on local climate action
- representing Manchester within the UK Cities Climate Investment Commission (UKCCIC) which has identified the scale of investment needed to decarbonise the UK’s core cities and proposed new ways of attracting large-scale private finance in to fund the actions needed
- securing Manchester’s place as one of three focus areas for phase two of the UKCCIC work looking in detail at the capacity and systems that local areas will need to develop project pipelines that can unlock private finance
- creating a mandate for action from Manchester’s residents via a community climate assembly
- supporting the creation and launch of a signposting service for businesses looking to reduce their emissions and grow their companies:
www.beenetzzero.co.uk
- leading development of the GrowGreen project which brought £3.5 million to the city and enabled the development of the West Gorton Community Park that demonstrates how nature-based solutions such as rain gardens and permeable paving can be used to reduce surface water flooding in urban areas and maximise other benefits such as improved biodiversity and health and well-being.

2.7 MCCP members have also been driving their own organisations to reduce their emissions. Details of these plans can be found in the Appendix 2 of the Framework itself, and updated in Appendix A of the Annual Report published in 2021.

3.0 Updating the Framework

- 3.1 The Framework is being updated to ensure it remains responsive to a changing city and evolving local and national policy, to improving data and modelling, plus to the increasing need for urgent action to tackle the climate emergency.
- 3.2 To stay within its carbon budget, the city needs to be reducing its emissions by 13% each year from 2018. The Annual Reports produced by MCCA, which hold the city accountable to the commitments made in the Framework, show that, at a city level, Manchester has not been reducing its emissions at this rate and so the pace of change needs to increase in future years to compensate for this.
- 3.3 The graph below shows the trajectory that the city should be on to stay within its carbon budgets and the actual rate of emissions reductions alongside. It shows the city is not decarbonising at the required rate.



- 3.4 To support a targeted and effective upscaling of action, the main content of the Framework Update has identified the scale of action needed to reduce direct emissions and stay within our carbon budgets.

4.0 Direct emissions - staying within our carbon budgets

- 4.1 In summer 2021, MCCA commissioned the environmental consultancy Anthesis to provide a detailed evidence base of Manchester's current carbon emissions and to use its innovative data model called SCATTER (Setting City Area Targets and Trajectories for Emissions Reduction) to outline the type and scale of action required to stay within the carbon budget. This work was supported by funding from Manchester City Council and the EU URBACT Zero Carbon Cities programme.
- 4.2 The work began by assessing the current emissions profile of the city in detail,

using the most up to date local and national data, with a focus on direct emissions, i.e., those generated within the city, that are the subject of our carbon budgets.

- 4.3 The next step was to deploy the SCATTER model to develop pathways to reduce our emission by 50% as the first milestone in staying within our carbon budgets.
- 4.4 The data in the space is complex and can be both incomplete and time lagged. Modelling tools must make certain assumptions around, for example, technology development and how to scale data from national to local level, or vice versa, as well as take into account the context of macro-factors such as grid decarbonisation and local and national policy.
- 4.5 The output is a set of more granular targets that describe what needs to happen for the city to reduce its direct emissions by 50%; by definition, these targets focus on buildings, ground transport and an increase in renewable energy generation.
- 4.6 These targets have:
 - Carbon savings calculated for them, showing how each contribute to the overall emissions reductions required.
 - Indicative costs identified, including capital and operational expenditure as relevant, along with potential funding streams.
 - Challenges outlined, based on research in the relevant sector and local consultations.
 - Co-benefits identified, highlighting the positive results in other areas that can be brought about by climate action.
 - Stakeholders and relevant partners identified who can support change.
 - Recommended actions needed to deliver the granular target that are categorised by where there is agency to act locally, with Greater Manchester partners, and with national government.
- 4.7 Outputs have been cross-referenced from SCATTER to the Local Area Energy Plan, recently produced for the Greater Manchester Combined Authority by the Energy Systems Catapult, and with the UK Climate Investment Commission report recently produced by the Connected Places Catapult for the Core Cities, including Manchester.

5.0 Indirect emissions – tackling our consumption patterns

- 5.1 Whilst the key focus of the Update is on setting targets for the city's direct emissions, an update is being provided on recent work to better understand and address indirect emissions, including on research carried out by the University of Manchester's Sustainable Consumption Institute on consumption emissions and the recovery from Covid-19, and on food with support from the Manchester Food Board.

6.0 Adaptation and resilience to climate change

- 6.1 The Update will include an overview of research to move the city forwards on climate adaptation and resilience. This centres around work by Manchester Metropolitan University to develop a framework for understanding Manchester's vulnerability to climate risk, a vision for a climate ready city and a set of principles and actions for different stakeholders to implement.

7.0 Health and wellbeing

- 7.1 A newly convened advisory group on health and wellbeing has been established by the Manchester Health & Wellbeing Board, MCCP and MCCA and has fed into the Update regarding the intersection between addressing health inequalities and climate action.

8.0 Engagement with stakeholders

- 8.1 Engagement with stakeholders has been a core part of the process of co-designing the recommended actions in the Update. This has involved multiple departments within Manchester City Council including planning, city policy, transport, highways, estates, housing, and neighbourhoods; and wider partners including members of the Manchester Climate Change Partnership and its advisory groups; Manchester Housing Providers Partnership; the Strategic Housing Board; Manchester Food Board; ENWL; Transport for Greater Manchester, and Greater Manchester Combined Authority (GMCA) environment team.
- 8.2 For businesses, this has included extensive conversations with local business support organisations including the Chamber of Commerce, Business Growth Hub, BITC and Pro Mcr to access their knowledge and experience from working with thousands of companies across many sectors, and on a review of existing research on the barriers and drivers for action by Anthesis.
- 8.3 For residents, this has been informed by the Community Climate Assembly held in 2021 which included a series of workshops where residents discussed climate-related issues including transport, buildings, energy, food and fashion. This was supplemented by a small-scale survey of residents disseminated via the In Our Nature community engagement programme.
- 8.4 A final opportunity for residents and business to comment on the Update will be launched via social media later in July as part of this phase of review and comment with stakeholders.

9.0 Next steps

- 9.1 Comments and feedback will be collated from this Committee, MCCP members and wider city stakeholders, including residents and business and fed into the final publication, due for release in September.

10.0 Recommendations

- 10.1 The Scrutiny Committee is asked to consider and make comments on the content of the report.