

Manchester City Council Report for Information

Report to: Environment and Climate Change Scrutiny Committee – 10 February 2022

Subject: Refresh of Manchester's Climate Change Framework 2020-25

Report of: Manchester Climate Change Agency and Partnership

Summary

This report provides a progress update on the refresh of Manchester's 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."

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) have been given the responsibility to set the city's strategy for tackling the climate emergency.
- 1.2 In 2020 the Manchester Climate Change Framework was published; it 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 a live document, 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.

2.0 Background

- 2.1 Manchester's Climate Change Framework 2020-25 (the Framework) was developed with support from the Tyndall Centre for Climate Change Research at the University of Manchester.
- 2.2 It calculates a science-based target for the city to reach zero carbon emissions by 2038 and sets a total carbon budget of 15m tCO₂ for the period 2018-2100. It also sets a target for the city to reduce its emissions by 50% by 2025, with further milestones along the way to 2038. See graph and table below.

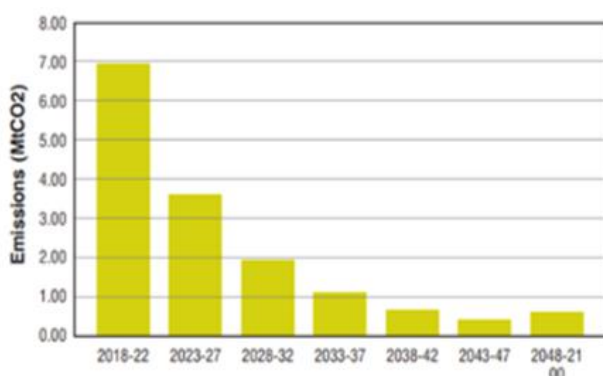


Figure 4: Emissions projections consistent with the 15 MtCO₂ budget – starting from common year (2017)

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

- 2.3 The Tyndall Centre method includes direct, energy-related emissions in the city's carbon budget, sometimes described as territorial emissions. Indirect emissions are not included in the budget but are addressed by the Framework.
- 2.4 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

2.5 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

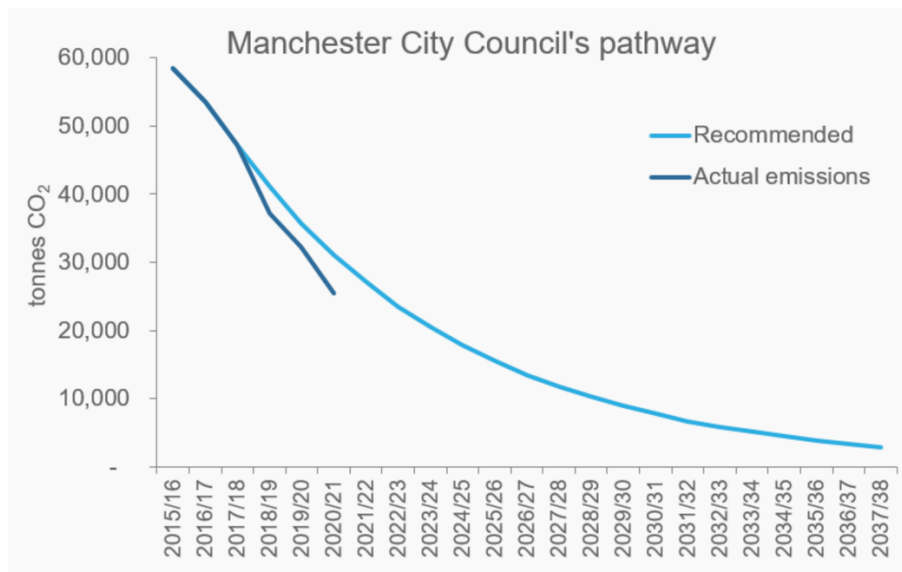
2.6 It sets out a range of broad city-level actions against each of those six priority areas, for example to “*improve the energy efficiency of our buildings as far as possible to reduce our demand for gas*”.

2.7 Where available, it references relevant targets within the GM Environment Plan 2019-2024, such as “*6% of homes to be connected to a low carbon heating source every year*”.

2.8 The Framework also sets out a list of 15 actions that the city needs every resident and organisation to take to help meet the climate change targets.

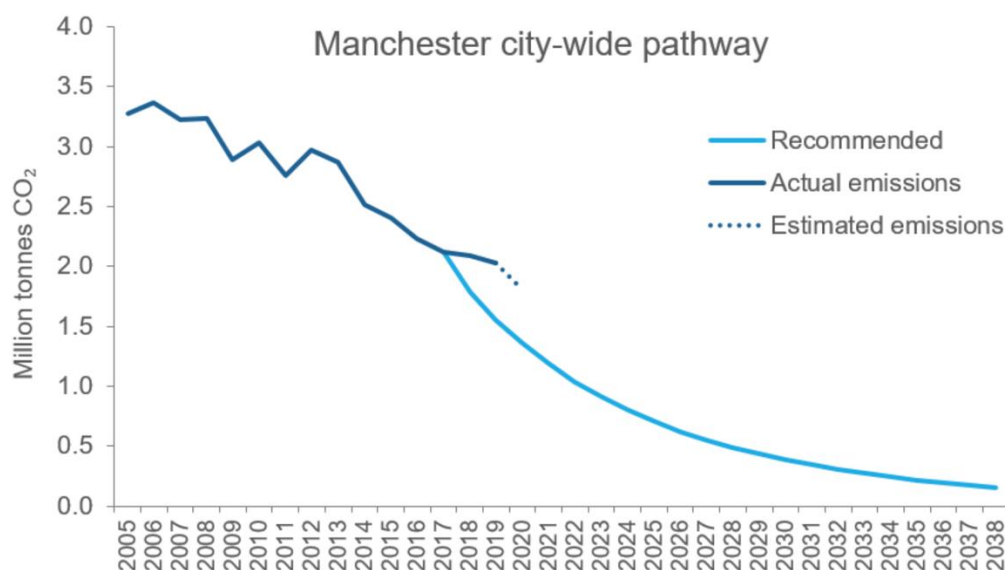
2.9 Much work has been undertaken by Manchester Climate Change Agency and Partnership to support delivery of the Framework and meeting its targets. This includes developing a Net Zero New Build standard addressing both operational and embodied energy which has been shared with the Council as part of the development of the new Local Plan; being part of the UK Cities Climate Investment Commission 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; creating a mandate for action from Manchester’s residents via a community 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.

2.10 Partnership 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. As has been shown in other reports to this Committee, the City Council are on track to reduce their emissions in line with the 50% target by 2025, see graph below.



3.0 Refreshing the Framework

- 3.1 The Framework is being updated to ensure it remains a live document, 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 meet its targets, 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 this upscaling of action, the main focus of the Framework refresh is to establish more detailed and quantified data around the actions the city needs to take to reduce its direct, energy related emissions and stay within its carbon budgets.
- 3.5 The refresh of the Framework is also updating the city's strategy around climate adaptation and resilience, presenting recent research on indirect emissions, identifying indicators on addressing health inequalities through climate action, and expanding actions for local residents and businesses.

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 of action required to meet the city's 2025 targets, and beyond. 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 potential pathways to reach the 2025 target and to stay within our carbon budgets beyond to 2038. Each emissions source has been explored and a huge amount of data has been generated; this is now being sense-tested as there are multiple challenges to address.
- 4.4 The data is complex and can be both incomplete and time lagged. Modelling tools have to 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 objective is to define a set of targets that describe what needs to happen by 2025 across a range of sectors to stay within our carbon budget. The targets may include examples such as:
- X thousand households to receive a deep retrofit
 - X% reduction in energy demand for domestic heating, cooling & hot water
 - X% reduction in energy demand for domestic appliances & lighting
 - X% reduction in commercial energy for heating, cooling & hot water
 - X MW of solar PV to be installed
 - X% reduction in kms travelled by vehicles powered by fossil fuels
- 4.6 These targets and actions will 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.
- Timeframes proposed, for example, immediate or short term.
- Barriers 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.
- Potential indicators identified that could be used to monitor progress, referencing both national and local data sources.

4.7 As part of the data testing, work is also being carried out to cross-reference the SCATTER findings with 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.

4.8 To further support development of the actions in the Framework, a series of consultations have been held with policy makers and service managers in the city in November and December 2021 and in January 2022. This has encompassed multiple departments within Manchester City Council including planning, city policy, transport, highways, estates, housing and neighbourhoods, a working group to Manchester Housing Providers Partnership, the Manchester Climate Change Partnership and its zero-carbon advisory group and adaptation advisory group, Transport for Greater Manchester and Greater Manchester Combined Authority (GMCA) environment team. The workshops are helping to consolidate the Council's leadership role in citywide planning and are ensuring the Framework's actions are co-designed.

4.9 The consultations have sought to explore how actions could be categorised to aid implementation according to:

- What actions we have direct control to deliver in Manchester, whether by the Council, the wider public sector, the private and third sector, community groups and all the people who live, work and visit the city.
 - For example, using planning policy and the emerging Local Plan to support zero-carbon new builds, driving retrofit in Council-owned and social housing stock, supporting community engagement on climate action, and embedding nature-based solutions into strategic developments.
- What actions we need to be working with Greater Manchester on, via Greater Manchester Combined Authority, Transport for Greater Manchester (TfGM) and wider stakeholders in the city region.
 - For example, working with TfGM to shift transport patterns towards public transport and active travel, working with GMCA on their housing Retrofit Accelerator, and working with business support organisations across the city-region to coordinate climate advice for companies.

- What actions we need to be advocating for national government to take or accelerate, whether that be policy, infrastructure or funding, along with other actors at national level (or beyond the city region).
 - For example, advocating for the government to support cities to decarbonise faster than the UK target of 2050 which includes provision of funding that accelerates this and a policy landscape that provides market certainty for investment.
 - What space there is for innovation and thinking differently about taking action on climate.
 - For example, by coupling actions as in green prescribing or bundling actions to maximise economic, social and environmental returns and attract the large-scale capital investment that will be needed for the city to reach its goals.
- 4.10 Overall, the actions being developed by the Framework refresh will help to set out the role of the Council in leading citywide plans, they will help to bring more organisations into the Partnership and increase their ambition, they will help residents and businesses to take more action, and clarify where we need national government to do more.

5.0 Indirect emissions – tackling our consumption patterns

- 5.1 Whilst the key focus of the Framework refresh is on setting targets for the city's direct emissions, an update will also be 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 refresh of the Framework will also include an update on 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.
- 6.2 A workshop is taking place in February with senior decision-makers in the Council to ensure this work is aligned to the city's Green & Blue Infrastructure Strategy and recently launched initiatives such as Our Rivers Our City.

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 and the Framework refresh will include an update from this group.

- 7.2 This will cover recent research on the intersection between addressing health inequalities and climate action and is seeking to propose a set of indicators that would support Manchester to track its progress on this issue.

8.0 Consultation

- 8.1 Alongside consultations with policy makers and stakeholders, to support the refresh of the Framework, in particular the update of the 15 actions, consultations have been carried out with local residents and businesses.
- 8.2 For businesses, the consultation included extensive conversations with local business support organisations including the Chamber of Commerce and the Business Growth Hub 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 This was supplemented by a workshop with a cohort of large local companies and by a small-scale survey to small and medium enterprises (SMEs).
- 8.4 A second consultation with business is now being developed to seek feedback on the ambition and actions in the Framework refresh before its publication.
- 8.5 For residents, the consultation has been informed by the Community Assembly held in 2021 which included a series of workshops where residents discussed climate-related issues including transport, buildings, energy, food and fashion. The Assembly was supported by the National Lottery, the Council and the EU-funded Zero Carbon Cities project and resulted in a mandate for climate action that was taken to COP26.
- 8.6 This was supplemented by a small-scale survey of residents disseminated via the In Our Nature community engagement programme.
- 8.7 A second consultation with residents is now being developed to seek feedback on the ambition and actions in the Framework refresh before its publication.

9.0 Next steps

- 9.1 Work continues this quarter (Jan-Mar 2022) to finalise the contents of the refreshed Framework which includes: final reviews of the evidence base, targets and actions and ensuring their alignment with other policies and strategies at local and city-region level; second consultations with policy makers, key stakeholders, residents and businesses; and ensuring all the work outlined above is appropriately represented and communicated.
- 9.2 The refreshed Framework is expected to be completed in the first quarter of the new financial year (April-June 2022) and launched in quarter two (July-Sept 2022).

10.0 Recommendations

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