Manchester City Council Report for Resolution

| Report to: | Environment and Climate Change Scrutiny Committee – 8 September 2022 Executive – 14 September 2022 |
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| Subject: | Manchester Climate Change Partnership Framework 2022 Update |
| Report of: | Manchester Climate Change Agency |

Summary

The Manchester Climate Change Partnership Framework 2022 Update (2020-25) presents the findings of detailed modelling done to identify granular targets for reducing the city's direct emissions by 50%, to help us stay within our carbon budget.

It also provides an overview of ongoing work on the Framework's other headline objectives, notably adaptation and resilience, and recommends over 150 specific actions for delivery at local, city-region and national level, by government and the wider public sector, private companies and third sector organisations, and communities and individuals that will support our transition to a zero carbon and climate resilient city by 2038 at the latest.

This item links directly to the report on the Council's refreshed Climate Change Action Plan and Annual Report which are also on the Committee's agenda. The Council's delivery of the Climate Change Action Plan will make a substantial contribution to the implementation of the 2022 Update to Manchester's Climate Change Partnership Framework (2020-25).

Recommendations

It is recommended that the Environment and Climate Change Scrutiny Committee:

1. The Environment and Climate Change Scrutiny Committee are asked to note and comment on the content of the 2022 Update of the Manchester Climate Change Partnership Framework (2020-25).

The Executive is recommended to:

- Formally adopt the 2022 Update to the Manchester Climate Change Partnership Framework's aim, vision, objectives, and targets as the definition of what Manchester needs to achieve to 'play its full part in limiting the impacts of climate change';
- 2. On behalf of the city, endorse the 2022 Update to the Manchester Climate Change Partnership Framework (2020 – 25) as Manchester's high-level strategy for achieving the aim, vision, objectives, and targets; and

3. Support the delivery of the refreshed 2020-25 Manchester City Council Climate Change Action Plan to contribute towards the successful implementation of the citywide Framework.

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."

Equality, Diversity and Inclusion - the impact of the issues addressed in this report in meeting our Public Sector Equality Duty and broader equality commitments Actions set out in the Manchester Climate Change Framework 2020-25 relate to the need for just and equal delivery of climate action across Manchester. This includes areas such as community engagement, warmer homes, accessible transport, access to green spaces and tackling fuel poverty. There is also detail in the Framework on creating a 'just transition' and a chapter on creating an inclusive, net zero and climate resilient economy.

| Manchester Strategy outcomes | Summary of how this report aligns to the OMS/Contribution to the Strategy |
|--|---|
| A thriving and sustainable city: supporting a diverse and distinctive economy that creates jobs and opportunities | The Manchester 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 Manchester 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 Manchester 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 Manchester 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 Manchester 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 |

Financial Consequences – Revenue

Delivery of the Update to the Manchester Climate Change Framework will require revenue expenditure by stakeholders across the city, including the City Council.

Financial Consequences – Capital

Delivery of the Update to the Manchester Climate Change Framework will require capital expenditure by stakeholders across the city, including the City Council.

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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

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 budget.

2.0 Background

- 2.1 Manchester's Climate Change Partnership 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.
- 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

3.0 The 2022 Update to the Climate Change Partnership Framework Update

- 3.1 An-update of the Manchester Climate Change Partnership Framework has been developed to ensure it remains a live document, responsive to the needs of a changing city and the urgency of the climate emergency.
- 3.2 The **purpose of the 2022 Update** to the Framework is to:
 - Present the findings of detailed modelling done to identify granular targets for reducing the city's direct emissions by 50%, to help the city stay within its carbon budget.
 - Provide an overview of ongoing work carried out in support of the Framework's other headline objectives, notably on adaptation to climate change.
 - Recommend specific actions for delivery at local, regional, and national level by government and the wider public sector, private companies and third sector organisations, and communities and individuals, that will support our transition to a zero carbon and climate resilient city.

4.0 The City's Direct Emissions

- 4.1 Manchester's carbon budget relates to its direct emissions. These are defined by the Tyndall Centre as carbon dioxide emissions from our energy system, i.e., the gas, electricity and liquid fuels used to power and heat our homes and businesses and to transport us around the city.
- 4.2 Manchester has not been reducing its direct emissions by the targeted 13% per year and so we are not currently on track to stay within our carbon budget and are at risk of missing our first milestone: to reduce the city's direct emissions by 50% by 2025.
- 4.3 The Update unpacks the sources of Manchester's current direct emissions to clarify where focus is required to get back on track. It sets out in granular detail the scale of action needed to reduce our direct emissions from buildings and transport by 50%, and the scale of increase in renewable energy generation needed to support this, using an evidence base provided by Anthesis' SCATTER carbon data tracking model.
- 4.4 The Update sets out two scenarios for the city to remain within its carbon budget and reach zero carbon by 2038. It does not identify a preferred scenario, rather, it illustrates that an increased scale and urgency of action is needed to meet the city's goals.

5.0 Consumption-based Emissions

5.1 The city's indirect, or consumption-based, emissions are those that occur from the services and goods we buy, use, and ultimately dispose of. Whilst they are not included within our carbon budget, indirect emissions are important as they are commonly 60% larger than direct emissions and so contribute to the city's overall climate impact.

- 5.2 The Update provides an overview of research by the University of Manchester to help the city understand its indirect emissions it estimates the city's footprint was over 3m tCO2e in 2019; and identifies sectoral hotspots for us to focus on for maximum impact, including construction, food and drink, waste, and wastewater.
- 5.3 The Update also presents a new agreement reached by members of Manchester's Climate Change Partnership (MCCP), with support from its Zero Carbon Advisory Group, which notes the importance of tackling aviation emissions through national policy to avoid displacement of emissions from one UK airport to another, and of international industrial collaboration to deliver the technologies and processes needed for zero emission flights.

6.0 Adaptation and Resilience

- 6.1 While bold action on climate change mitigation (reducing our emissions) is vital, the global and local climate is already changing, and many climate impacts are already 'locked in' and deemed irreversible even under the most ambitious emissions reduction scenarios.
- 6.2 The Update provides an overview of work by Manchester Metropolitan University and MCCP's Adaptation and Resilience Advisory Group to help the city assess its vulnerability to climate risk, define the characteristics of a climate resilient city, and establish principles to guide both ambition and practical action, including how green infrastructure and nature-based solutions can support these efforts.

7.0 Health and Wellbeing

- 7.1 The actions we need to take to reduce our emissions and adapt the city to climate change also have the potential to improve the health and wellbeing of Manchester's residents. Conversely, actions that improve our health and wellbeing can also help to tackle the climate crisis.
- 7.2 The Update presents a summary of work by MCCP's new Health and Wellbeing Advisory Group and Manchester's Marmot Taskforce on the link between health inequalities and climate change, including creation of a tailored action plan, and the need for indicators to track climate and health.

8.0 Inclusive, Zero Carbon and Climate Resilient Economy

- 8.1 Meeting our goals on climate action can also help Manchester to establish a more inclusive economy where everyone can benefit from playing an active role in decarbonising and adapting the city to the changing climate.
- 8.2 The Update provides an overview of activity underway to build demand for, and increase supply of, green skills into make sure that local businesses and residents can make the most of the new opportunities that the shift to a zero carbon city offers.

9.0 Co-benefits of Climate Action

- 9.1 The systemic transitions required to tackle the climate crisis within cities are complex and interlinking. This creates significant challenges in delivery but also means that action to tackle the climate crisis can help us address other priority issues including fuel poverty, food poverty, health inequalities, skills development, and jobs growth.
- 9.2 Throughout this Update, the co-benefits of climate action are highlighted and categorised by their potential to help us reduce our carbon emissions; boost our adaptive capacity; improve the health and wellbeing our communities; and increase the inclusivity, productivity, and sustainability of our economy.

10.0 Challenges, Enablers and Examples of Good Practice

- 10.1 The transition to a zero carbon, climate resilient city presents significant economic, technical, institutional, societal, and regulatory challenges. The Update highlights a selection of these to provide context to the topics covered and the actions being recommended.
- 10.2 It also highlights where policies at local, regional, and national level are incentivising and enabling actions of a similar type and magnitude to reinforce the feasibility and credibility of the actions being recommended.
- 10.3 Finally, to illustrate that climate action is possible, the Update signposts examples of good practice from within Manchester, the wider city region and across the UK.

11.0 Ensuring a Just Transition

- 11.1 Ensuring that all of Manchester's residents are protected from the impact of climate change, that actions to help the transition to a zero carbon and climate resilient city do not have a negative impact on the most vulnerable people, and that the costs of change do not fall unevenly on those that are least able to afford them, is a constant theme throughout this Update.
- 11.2 The recommended actions have been developed with this in mind and the cost of living crisis is recognised as a key challenge in this chapter of the Update.

12.0 Financing the Transition

- 12.1 The cost of the transition to a zero carbon and climate-resilient city, is significant. The Local Area Energy Plan for Manchester estimates the cost to decarbonise the city's energy system is over £13bn (£4 billion by 2030).
- 12.2 This level of capital investment is beyond the reach of public finances and so private finance is critical to our success. The scale of private funds available is sufficient to support substantial activity, however, new approaches must be developed to unlock this resource.

12.3 The Update summarises the challenges and developing climate measures at sufficient scale, volume, and predictability to attract the patient capital investment needed to accelerate progress and achieve the ambitious climate change targets that Manchester has set.

13.0 Recommended Actions in the Update

- 13.1 To achieve our climate goals, action needs to be taken urgently and by everyone by government at local and national level, by institutions and organisations in the public, private and voluntary sector, and by residents and communities across the city.
- 13.2 The Update has co-designed over 150 recommended actions organised into four categories according to where there is agency to act; that is, where there is direct control to deliver, affect or influence the required change or outcome:
 - To be delivered locally, where direct control lies in Manchester
 - To work on at city-region level, with Greater Manchester partners
 - To advocate for national government to do
 - To do differently, where there are opportunities to innovate

14.0 Key Messages of the 2022 Update

- 14.1 There are five key messages within the Update:
 - Urgent action is needed to reduce direct emissions from our buildings and ground transport, and to increase renewable energy generation, if Manchester is to stay within its carbon budget.
 - Decisive action is needed to assess the city's vulnerability to climate change and to ensure we are adapting our infrastructure, buildings, economy, and residents to be resilient to a changing climate.
 - Everyone has a role to play individuals, organisations, local and national government and there is a great deal we have the power to achieve locally, if we work collaboratively.
 - The cost of transitioning to a zero carbon, climate resilient city cannot be borne solely by the public purse, so we need to find innovative ways to unlock private finance investment.
 - Tackling the climate crisis brings opportunities to deliver wider strategic ambitions, including improving people's health, reducing fuel and food poverty, creating new jobs and economic growth, and delivering a greener city for everyone.

15.0 Next Steps

15.1 This Update is a call to action for everyone in Manchester. MCCP will champion delivery of the recommendations set out, but everyone needs to increase the pace and scale of their own activity, and reach out to support and collaborate with others, if we are to succeed in achieving the city's ambitions.

- 15.2 To support the prioritisation of effort, in particular for reducing direct emissions, MCCP has asked MCCA to assess the comparative impact of the recommended actions, building on the insights already provided by the detailed emissions baseline and 50% reduction targets in this Update.
- 15.3 MCCP has also asked MCCA to develop options for tracking the city's progress towards its zero carbon and climate resilient goals, in a way that enhances the existing Annual Reports. MCCP members and its independent Advisory Groups will support all these activities.

16.0 Recommendations

16.1 It is recommended that the Environment and Climate Change Scrutiny Committee:

(1) Note and comment on the content of the 2022 Update of the Manchester Climate Change Partnership Framework (2020-25).

16.2 It is recommended that the Executive:

(1) Formally adopt the 2022 Update to the Manchester Climate Change Partnership Framework's aim, vision, objectives, and targets as the definition of what Manchester needs to achieve to 'play its full part in limiting the impacts of climate change';

(2) On behalf of the city, endorse the 2022 Update to the Manchester Climate Change Partnership Framework (2020 - 25) as Manchester's high-level strategy for achieving the aim, vision, objectives, and targets; and

(3) Support the delivery of the refreshed 2020-25 Manchester City Council Climate Change Action Plan to contribute towards the successful implementation of the citywide Framework.