



Neighbourhoods and Environment Scrutiny Committee

Date: Wednesday, 5 February 2020

Time: 2.00 pm

Venue: Council Antechamber, Level 2, Town Hall Extension

This is a **Revised and Supplementary Agenda** containing an additional item of business (Item 6) that was not listed on the original agenda.

Access to the Council Antechamber

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Membership of the Neighbourhoods and Environment Scrutiny Committee

Councillors - Igbon (Chair), Azra Ali, Appleby, Butt, Flanagan, Hassan, Hughes, Jeavons, Kilpatrick, Lynch, Lyons, Razaq, Sadler, Strong, Whiston, White and Wright

Revised Agenda

6. Climate Change

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Report of The Deputy Chief Executive and City Treasurer

The Manchester Climate Change Framework 2020-25 is scheduled for publication on 28 February 2020. The City Council will be asked to formally adopt the target and endorse the framework on behalf of the City during March 2020. The City Council has also committed to producing its own Action Plan during March 2020.

This report provides the Committee with a series of documents that provide an update on progress to develop the city-wide and Council plans.

Appended to this report are:

1. An outline of the draft city-wide Manchester Climate Change Framework 2020-25, progress update on Manchester Climate Change Partnership Action Plans and Tyndall Centre review of targets; and
2. The draft Manchester City Council Climate Change Action Plan 2020-25.

6a. The draft Manchester Climate Change Framework 2020-25

This information is provided as an appendix to agenda item 6.

6b. The draft Manchester City Council Climate Change Action Plan 2020-25

This information is provided as an appendix to agenda item 6.

6c. Existing and future Council funding to address the Climate Emergency and deliver the Climate Change Action Plan 2020-25

This information is provided at section 5 of the report at agenda item 6.

Information about the Committee

Scrutiny Committees represent the interests of local people about important issues that affect them. They look at how the decisions, policies and services of the Council and other key public agencies impact on the city and its residents. Scrutiny Committees do not take decisions but can make recommendations to decision makers about how they are delivering the Manchester Strategy, an agreed vision for a better Manchester that is shared by public agencies across the city.

The Neighbourhoods and Environment Scrutiny Committee has responsibility for looking at how the Council and its partners create neighbourhoods that meet the aspirations of Manchester's citizens.

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Joanne Roney OBE
Chief Executive
3rd Floor, Town Hall Extension,
Lloyd Street
Manchester, M60 2LA

Further Information

For help, advice and information about this meeting please contact the Committee Officer:

Lee Walker
Tel: 0161 234 3376
Email: l.walker@manchester.goc.uk

This revised agenda was issued on **Wednesday, 29 January 2020** by the Governance and Scrutiny Support Unit, Manchester City Council, Level 3, Town Hall Extension, Manchester M60 2LA

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**Manchester City Council
Report for Information**

Report to: Neighbourhoods and Environment Scrutiny Committee – 5
February 2020

Subject: Climate Change

Report of: The 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 City Council will be asked to formally adopt the target and endorse the framework on behalf of the City during March 2020. The City Council has also committed to producing its own Action Plan during March 2020.

This report provides the Committee with a series of documents that provide an update on progress to develop the city-wide and Council plans. These are:

1. An outline of the draft city-wide Manchester Climate Change Framework 2020-25, progress update on Manchester Climate Change Partnership Action Plans and Tyndall Centre review of targets; and
2. The draft Manchester City Council Climate Change Action Plan 2020-25.

Recommendations

It is recommended that the Committee:

1. Consider the progress that has been made to develop a city-wide Manchester Climate Change Framework 2020-25 and comment on the Tyndall Centre for Climate Research analysis; and
 2. Note and comment on the content of the draft Manchester City Council Climate Change Action Plan 2020-25.
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Wards Affected: All

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

Developing a citywide climate change framework is fundamental to ensuring that everyone in the city plays their full part in addressing climate change. The Council is one of the key stakeholders who have committed to producing an action plan by March 2020 which sets out the Council's role in tackling our own emissions and influencing and supporting a reduction across the whole city. Delivering the draft 5 year plan will require a significant level of new revenue and capital investment to build on the existing resources which are already committed to improving the city's environment.

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.

Contact Officers:

Name: David Houlston
Position: Strategic Lead Policy and Partnerships
Telephone: 0161 234 1541
Email: d.houlston@manchester.gov.uk

Name: Richard Elliott
Position: Head of Planning and Critical Infrastructure
Telephone: 0161 219 6494
Email: r.elliott@manchester.gov.uk

Name: Jonny Sadler
Position: Programme Director, Manchester Climate Change Agency
Telephone: 07572 419150
E-mail: jonny.sadler@manchesterclimate.com

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 2018
Manchester City Council Climate Change Action Plan 2016-20
Manchester Zero Carbon 2038, Manchester City Council's Commitment, March 2019

1.0 Introduction

1.1 This report provides the committee with a series of documents relating to Manchester's progress to meet the science based targets that it has adopted and to be zero carbon by 2038 at the latest. These are:

- An outline of the draft Manchester Climate Change Framework 2020-25, progress update on Manchester Climate Change Partnership Action Plans and Tyndall Centre review of targets; and
- The draft Manchester City Council Climate Change Action Plan 2020-25.

2.0 Background

2.1 In November 2018, following analysis by the Tyndall Centre for Climate Change Research, the Council adopted a science-based carbon budget of 15 million tonnes of CO₂ between 2018 and 2100, and committed the city to becoming zero carbon by 2038 at the latest.

2.2 In March 2019, the Council endorsed the draft Manchester Zero Carbon Framework as the city's overarching approach to meeting science-based targets on tackling climate change, as part of the wider Our Manchester Strategy. This report included draft action plans from a range of organisations who are members of the Manchester Climate Change Partnership and are collectively responsible for 20% of the city's emissions.

2.3 In July 2019, Manchester City Council declared a climate emergency. This declaration recognises the need for the Council, and the city as a whole, to do more to reduce its carbon emissions and mitigate the negative impacts of climate change. It also demonstrated the Council's commitment to be at the forefront of the global response to climate change and to lead by example.

SECTION 1: Draft city-wide Manchester Climate Change Framework 2020-25

3.0 Update on production of the draft framework and progress update on Manchester Climate Change Partnership Action Plans and Tyndall Centre review of targets.

3.1 In July 2018, Manchester Climate Change Agency (MCCA) commissioned the Tyndall Centre to produce the report, 'Quantifying the implications of the Paris Agreement for the city of Manchester', setting out the science-based targets that Manchester should adopt to be in line with the Paris Agreement.

3.2 The proposed targets were presented to Manchester City Council in October in 2018, as part of the 'Playing Our Full Part' proposal, produced by the Manchester Climate Change Agency and Partnership. The targets were then formally adopted by the City Council, on behalf of the city, in November 2018. In February 2019, MCCA and MCCB published the 'Draft Manchester Zero

Carbon Framework 2020-25 to begin to set out what Manchester needs to do to meet its targets.

- 3.3 As part of the climate emergency declared in July 2019, the council committed to review the feasibility of bringing forward the year of the zero carbon target. The Tyndall Centre were commissioned to undertake this review and a copy of the brief for this commission can be found on the Climate Change Agency's website (<http://www.manchesterclimate.com/targets-2020>). The Tyndall Centre review will conclude at the end of February. The initial findings from this work were presented to the Climate Change sub group on 23 January 2020.
- 3.4 The Climate Change Agency is focussed on achieving at least a 50% reduction in carbon dioxide emissions over the next five years, and staying within the science-based budget for the city. The current target year for becoming zero carbon is 2038 at the latest.
- 3.5 A draft version of the citywide framework is attached to this paper as Appendix 1. This sets out how the city as a whole needs to play its full part in tackling climate change, to ensure that Manchester stays within its carbon budget of 15 MtCO₂. It also provides a summary of the progress of those members of the Climate Change Partnership that are producing their own organisational climate change plans.
- 3.6 The Manchester Climate Change Framework 2020-25 is scheduled for publication on 28th February 2020. The City Council will be asked to formally adopt the target and endorse the framework on behalf of the City during March 2020. The City Council has also committed to producing its own Action Plan during March 2020.

SECTION 2: Draft Manchester City Council Climate Change Action Plan 2020-25

4.0 Update on production of the draft Council plan

- 4.1 In 2009/10, the Council made a commitment to reduce its direct carbon emissions by 41% by 2019/2020. Following this, the Council produced a series of action plans which detailed the activities that would be undertaken in order to ensure that our commitments were met. Data for 2018/19 (published in July 2019) showed that the Council's direct emissions had reduced by 48.1% since the 2009/10 baseline; meaning that the 41% target was achieved, being surpassed a year ahead of schedule.
- 4.2 The Manchester City Council Climate Change Action Plan 2020-25 will be developed for March 2020. An initial version of the MCC Action Plan is included as Appendix 2. This sets out the Council's commitments to tackle climate change over the next five years, building on and scaling up activity from previous action plans over the last decade. It summarises the specific actions which are required to ensure that the Council reduces its direct

emissions by at least 50% by 2025, whilst also playing our full part in supporting and influencing the city to do the same.

- 4.3 The Council and a number of other strategic partners in the city have produced plans to support the delivery of the citywide draft Climate Change Strategy and Framework, which has been produced by the Manchester Climate Change Partnership (appendix 1).
- 4.4 Although there are many challenges to delivering these ambitions, the plan also recognises the enormous opportunities of transitioning to a zero carbon city and the importance of Manchester being a national and global leader in this area.

5.0 Financial and resource commitments

- 5.1 The Council has already committed significant investment and resources to tackle climate change. Examples include investments totalling £69 million for the Street Lighting LED replacement programme, Carbon Reduction Plan for the Council's operational estate and the Civic Quarter Heat Network.
- 5.2 The Street Lighting (PFI) project (£32.8m) involves procurement and installation of state-of-the-art, low energy, light emitting diode (LED) street lighting technology. The three-year installation programme started in September 2017 and it is intended that over 57,000 lights will be replaced by the end of contract in 2020. The scheme is funded via prudential borrowing, with the savings in energy costs being used to fund the capital financing costs. The Council has worked with Salix Finance to fund this scheme, who provide loans to the public sector to improve energy efficiency, reduce carbon emissions and lower energy bills. When completed, this will reduce carbon emissions by around 8,400 tonnes per year and save the Council £2 million.
- 5.3 The buildings in the Council's operational estate represented 68.9% of the Council's direct carbon dioxide emissions in 2018/19. The Carbon Reduction Programme (£10.2m) will invest in schemes such as combined heat and power, solar photovoltaic panels, and the use of LED lighting within the Council's estate. The first phase of delivery is due to complete by the end of Quarter 2 2020/21. This will involve around £2.6 million invested in energy conservation measures and around £4.3 million invested in energy generation technology at 13 buildings in the Council's operational estate. The investment will generate financial savings of around £716,000 per annum and reduce carbon emissions by circa 1,600 tonnes per annum. The remaining funding has been earmarked to support energy conservation or production measures at buildings where wider refurbishments are being designed. The programme is funded through prudential borrowing on an invest-to-save basis, using the savings on energy costs to fund the capital financing costs.
- 5.4 The Civic Quarter Heat Network project (£26.0m) will connect the Town Hall, Town Hall Extension and Central Library, Manchester Central Convention Centre, The Bridgewater Hall and Heron House. The project is expected to reduce the Council's direct carbon emissions by approximately 1,600 tonnes

of CO₂ from 2020/21. The network has been designed to enable future expansion, with efficiency and carbon savings increasing as more buildings join. The scheme has attracted some Government grant relating to heat networks, but is predominantly funded from prudential borrowing. The intention is that the capital financing costs will be funded from the energy savings.

- 5.5 At a neighbourhood level, the Neighbourhood Investment Fund (NIF) is available to support local priorities including environmental projects in wards and also improvements to green and blue infrastructure.
- 5.6 A range of Council teams and services also provide day-to-day resource to deliver the ambitions of the climate change agenda. These are summarised below:
- Neighbourhood Teams - engaging with residents to develop climate change action in ward plans, deliver events, build capacity and listen to residents;
 - Waste and Recycling - reduction in waste to landfill across the city and increase in recycling rates.
 - Parks - adaptation, sequestration and storage benefits. Contribution to the cities green and blue objectives including improved biodiversity.
 - Corporate Estates - delivering the Carbon Reduction Plan and embedding low carbon and energy efficiency measures within the Council's annual maintenance programme and general estates management.
 - Planning - support for development which meets the city's planning framework
 - City Policy - develop climate change action plans, monitor progress, coordinate council activity, and oversee the Green and Blue infrastructure strategy
 - European funded projects - Triangulum, C-Change, Grow Green, Zero Carbon Cities deliver climate change benefits for the city.
- 5.7 As part of the 2020/21 budget process, the requirement for further investment has been recognised in order to deliver the carbon reductions for the Council. Climate change has been included as an additional priority in the Council's updated Business Plan for 2020/21. The Zero Carbon Coordination Group is embedding climate change considerations into decisions and practices across the Council, including the updated Capital Strategy, HR policies such as a revised staff travel policy, and procurement decisions by including carbon considerations in the formal evaluation criteria. A further item on the implications for planning and building standards is due to come back to this Committee. The carbon action plan will also be fully costed for March 2020 but the priority actions and investments will be progressed in parallel in the short term.
- 5.8 In addition, a series of specific additional commitments have been made. As part of the 2019/20 budget process, funding of £120k was made available for two additional posts within City Policy to coordinate and project manage this work. A further £300k has been earmarked as part of the 2020/21 budget process, which will be used to:

- Underwrite the Chief Executive post within the Climate Change Agency for one year, subject to unlocking financial contributions from other partners in the city;
- Further strengthen the internal climate change team within the Council;
- Provide carbon literacy training to all Council staff by the end of 2020. Training is already being rolled out across staff in services including Neighbourhoods and Customer Services; and
- Procure additional technical expertise and research as required.

5.9 The Council is updating its Capital Strategy and this will focus more on prioritising investment in areas that will support delivery of the zero carbon ambitions. This is expected to include:

- Retrofit of the Council's operational estate;
- Energy generation and charging infrastructure, including Solar PV on suitable buildings and sites, batteries, EV charging infrastructure and heat pumps;
- Zero carbon commitments within delivery of the Northern and Eastern Gateway projects;
- Retrofit projects within the council housing stock managed by Northwards
- Purchase of electric vehicles for the waste and recycling fleet and the Council fleet;
- Commit to reducing carbon emissions within the delivery of highways projects; and
- Investment in public transport and active travel infrastructure such as cycling and walking.

5.10 The Council will use its limited capital and revenue resources to drive this agenda, while continuing to seek and lobby for additional external funding in order to do more, and to work with its partner organisations to assist with this work. It is recognised that delivery of this agenda is essential and the overall costs of inaction are far greater than the costs of acting now. There are also significant opportunities to benefit from becoming a zero carbon city and these are set out in the *Delivering a More Inclusive Economy, Our Manchester Industrial Strategy* and the mission-based approach within the *Greater Manchester Local Industrial Strategy*.

6.0 Recommendations

6.1 It is recommended that the Committee:

1. Consider the progress that has been made to develop a city-wide Manchester Climate Change Framework 2020-25 and comment on the Tyndall Centre for Climate Research analysis; and
2. Note and comment on the content of the draft Manchester City Council Climate Change Action Plan 2020-25.

APPENDIX 1: Manchester Climate Change Targets and Framework 2020-25 – update

Jonny Sadler, Programme Director, Manchester Climate Change Agency

1. Purpose

- 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. Recommendations

- 1) Note the report.
- 2) Note that the Tyndall Centre review of targets is scheduled for completion by 21st February 2020 and the Manchester Climate Change Framework 2020-25 is scheduled for publication on 28th February 2020. The City Council will be asked to formally adopt the target and endorse the framework on behalf of the City during March 2020.

3. Background and Introduction

- 3.1 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)
- 3.2 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.
- 3.3 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.
- 3.4 In November 2018 Manchester City Council formally adopted the targets, on behalf of the city.
- 3.5 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.

¹ <http://www.manchesterclimate.com/target-2018>

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

4. Targets

- 4.1 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.
- 4.2 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 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.
- 4.3 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
- 4.4 The final report is scheduled for completion by 21st February 2020.
- 4.5 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.

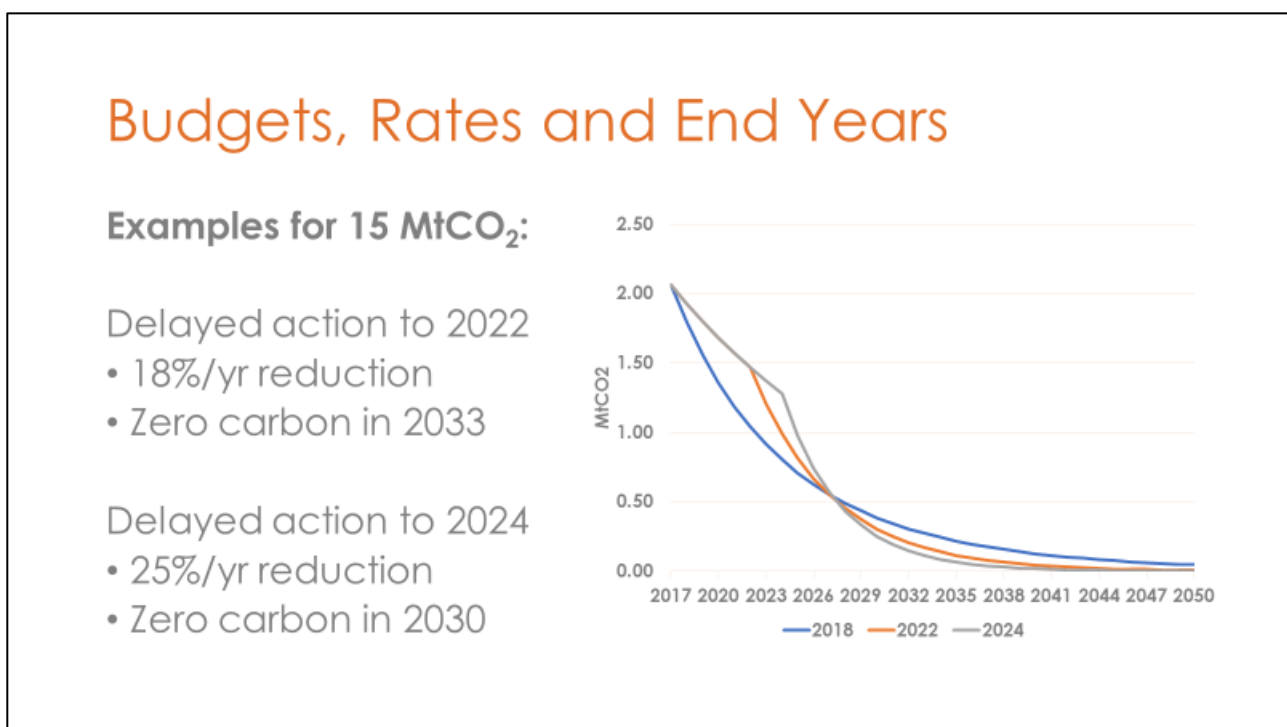
Direct CO₂ emissions: draft recommendations

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

- 3) Focus on immediate action to achieve a minimum reduction rate of 13% per annum and meeting interim (five-year) carbon budgets
- 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 4.7 below for further details).
- 5) Carbon budgets should be revisited in five years or in response to a new scientific synthesis report

4.7 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.



Aviation emissions: areas identified for consideration

- 4.8 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?

4.9 The final Tyndall Centre report on aviation will be complete by 21st February 2020.

Indirect / consumption-based CO₂ emissions

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

4.11 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.

4.12 The final report will be complete by 21st February 2020.

Target-setting and reporting methodology for organisations and sectors

4.13 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.

4.14 The final report will be complete by 21st February 2020.

5. Manchester Climate Change Framework 2020-25

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

5.2 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

5.3 The Framework is currently in development and will be published by the Partnership and Agency on 28th February 2020.

5.4 The following provides an outline of the document:

5.5 Introduction from the Manchester Climate Change Partnership & Agency

- Setting out that ambitious climate action now needs to form part of our every day 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

5.6 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.

5.7 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

5.8 Our Commitments / Objectives:

- Zero carbon
- Climate adaptation and resilience
- Health and wellbeing
- Good jobs and successful businesses

5.9 Urgent Actions to Meet Our Commitments:

- Urgent Actions for every resident and organisation: based around a list of 15 actions⁴

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

- Urgent Actions for Manchester City Council (see draft action plan in appendix 2), 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 focus on working with partners to engage residents and organisations across the city

5.10 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

5.11 Measuring and Reporting Progress

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

5.12 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.

5.13 Working with Other Cities

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

5.14 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

6. Next Steps

6.1 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 & 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, on behalf of the city, and; Framework 2020-25 endorsed by Manchester City Council

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APPENDIX 2: MCC Climate Change Action Plan 2020-2025

What is the purpose of this plan?

This document sets out Manchester City Council's commitments to tackling climate change over the next 5 years and builds on previous action plans over the last decade. The Council, alongside a number of other strategic partners in the city, have produced this plan to support the delivery of the citywide Manchester Climate Change Framework 2020-25 which has been produced by the Manchester Climate Change Partnership and Agency (<http://www.manchesterclimate.com/plan>). It summarises the specific actions which are required to ensure that the Council reduces its direct emissions by at least 50% by 2025 whilst also playing our full part in supporting and influencing the city to do the same. It also covers the Council's plans for adapting to the expected impacts of climate change and supporting and influencing others, including through the implementation of the Manchester Green and Blue Infrastructure Strategy 2015-25.

Climate change is something which effects everyone in Manchester and should not be viewed as an issue which is defined by geography, class or age. Our ambition is to ensure that all of Manchester's residents are protected from the impact of climate change, but that equality impact assessments are undertaken on specific projects to ensure that any changes that are made do not have a negative impact on the city's most vulnerable people.

Although there are many challenges to delivering these ambitions, we recognise the enormous opportunities of transitioning to a zero carbon, climate resilient city and the importance of Manchester being recognised as a national and global leader in this area.

1. How big is the challenge?

The challenge and crisis of climate change is unprecedented and is the single biggest challenge faced by the world today. We recognise that this challenge can only be overcome by taking urgent, radical action. This crisis is something that will effect us all, and for some the impact of climate change is already being felt. The UK is committed to playing its full part in meeting the international target to limit the global average temperature rise to well below 2°C above pre-industrial levels by the year 2100, and aiming for 1.5°C, known as the Paris Agreement within the United Nations Framework on Climate Change. The October 2018 Special Report by the Intergovernmental Panel on Climate Change (IPCC) found meeting a 1.5°C target is still achievable, success is dependent on a much more ambitious international effort and a major upscaling of investment. Exceeding this limit would affect weather patterns, cause sea levels to rise further, create food and water shortages, and affect

human security and economic growth. The special report Global Warming of 1.5°C (IPCC, 2018. Summary for Policymakers) by the IPCC shows that 420 million additional people will be exposed to extreme heat and 184–270 million additional people to water scarcity if global temperatures rise by 2°C, compared with a 1.5°C scenario (Page 4 and page 213: Hoegh-Guldberg et al., 2018. Impacts of 1.5°C global warming on natural and human systems). The world is now clearly in the midst of a climate and ecological emergency and there is now a unanimous consensus from the scientific community on the need for rapid action.

Councils are well placed to play a key role at local level in responding to the growing public concerns about the environment and issues such as climate change. Councils can help to convene partners and stakeholders to deliver leadership and direction on the specific environmental issues in their localities. We must harness the power of Manchester’s communities and ensure that all of our residents and stakeholder are able to take individual and collective action.

But we also recognise that the Council cannot provide all of the solutions, as combating climate change needs system-wide change that involves communities, businesses, individuals and stakeholders across all sectors of the economy, across the country and the wider world. The scale and pace of change needed will require major investments, changes to the way in which we use and interact with energy and changes to how we live our lives and define success. It will also redefine how we manage and interact with our environment. Above all, it will involve a collective leadership and shared ambition to deal with this challenge head on.

The Council takes this challenge seriously and has been acting to tackle climate change for over a decade. In 2009, we played an integral role when residents, businesses and other organisations came together to produce the first ever climate change strategy for the city; Manchester: A Certain Future. In 2010 we produced the first Manchester City Council Climate Change Delivery Plan which set out how the Council would provide citywide leadership on climate change whilst embedding low-carbon thinking and behaviour in our culture, processes and the operation of all our services.

In June 2018, Manchester Climate Change Partnership and Agency commissioned the Tyndall Centre for Climate Change Research at the University of Manchester to advise on targets for the city. The resulting ‘Playing Our Full Part’ proposal by the Partnership and Agency led to Manchester City Council adopting science-based carbon reduction targets for and on behalf of the city. This made Manchester one of the first cities in the world to adopt targets in line with the Paris Agreement. The targets related to ‘direct’ CO₂ emissions, from the energy used in buildings and transport. It was also recognised that Manchester would also need to act in relation to its ‘indirect’ CO₂ emissions, from the products and services we use here, but which originate outside of the city. And that emissions from flights from Manchester Airport would also need to be addressed, as part of a UK and international strategy.

In July 2019, Manchester City Council declared a climate emergency. This declaration recognises the need for the Council and the city as a whole to do more to reduce its carbon emissions and mitigate the negative impacts of climate change and demonstrated the Council's commitment to be at the forefront of the global response to climate change and to lead by example.

Discussions with the Tyndall Centre for Climate Change Research began in August 2019 and In November 2019 the Agency formally commissioned them to review the city's commitments, across four areas of activity:

- Direct / energy-only CO₂ emissions
- Indirect / consumption-based CO₂ emissions
- CO₂ emissions from flights from Manchester Airport
- Target-setting and reporting methodology for organisations and sectors

The recommended targets and objectives are set out in the Manchester Climate Change Framework 2020-25 and can be summarised as:

Direct [To be added when final framework approved]

Indirect / consumption-based emissions [To be added when final framework approved]

Flights from Manchester Airport [To be added when final framework approved]

Organisation and sector-level targets [To be added when final framework approved]

Now we need to ensure that our public commitments are backed up with ambitious and real action. This action plan builds on a decade of experience in environmental action and aims to make a vital local contribution meeting the challenges faced by the climate emergency. It sits alongside action plans from other members of the Manchester Climate Change Board who are collectively responsible for over 20% of the city's emissions and have also committed to become zero carbon by 2038 at the latest.

We recognise that limiting CO₂ emissions is not enough. Depending on how successful the world is at reducing emissions, global temperatures by 2100 are likely to rise by between 1.5°C and 4°C above pre-industrial levels. As such, we need to accept that some level of change is inevitable. Climate change is happening now and we need to assess the risks to our communities in order to reduce their vulnerability to these changes. Adopting appropriate mitigation measures will be essential if we are to create resilient communities of the future in Manchester.

The UK Climate Change Risk Assessment (CCRA) is a five-yearly assessment of the major risks and opportunities from climate change to the UK. The most recent evidence report was published by the CCC in 2016. It outlined risks to the UK in six key areas:

- Flooding and coastal change risks to communities, businesses and infrastructure;
- Risks to health, well-being and productivity from higher temperatures;
- Risks of water deficits in public water supply, and for agriculture, energy generation and industry, with impacts on freshwater ecology;
- Risks to natural capital, including soils, coastal, marine and freshwater ecosystems, and biodiversity;
- Risks from climate-related impacts on domestic and international food production and trade;
- New and emerging pests and diseases, and non-native species, affecting people, plants and animals.

2. How large are the Council's emissions and what have we already achieved?

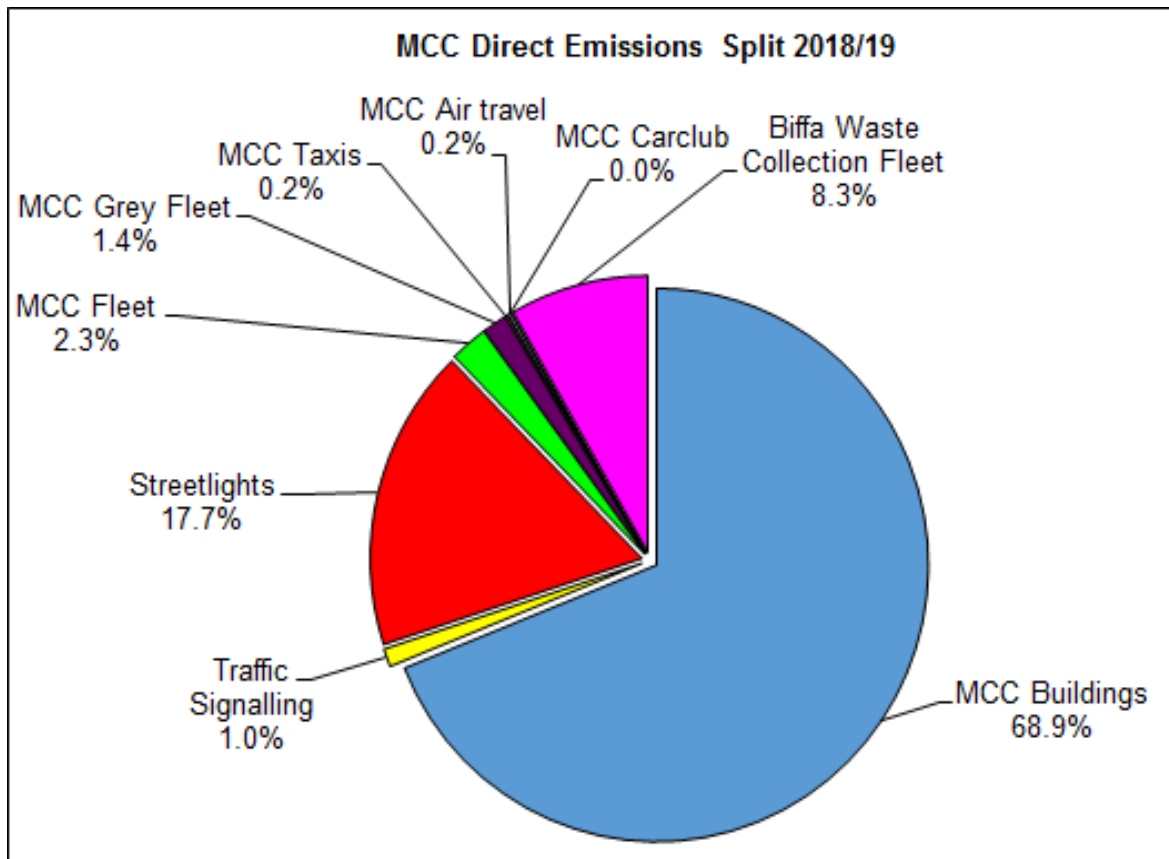
2.1 What is included?

The Council is able to influence behaviour and action across the city through a range of different policy levers and funding powers. This influence is far greater than the Council's actual direct emissions from its operation as an organisation, however, it is critically important to measure and report on these emissions and to set ambitious reduction targets.

Direct emissions are those which we can directly control or have financial responsibility for. We have been measuring our direct carbon emissions since 2009/10 and include a range of activities within the scope of our calculations. These activities are:

- Approximately 350 operational buildings, including leisure facilities but excluding schools and council housing;
- Street lighting;
- Biffa waste collection fleet;
- Our fleet vehicles; and
- Staff travel including staff using their personal cars to carry out council business (grey fleet), rail travel, air travel and travel by car club.

Figure 1: MCC Direct Carbon Emissions by Activity 2018/19

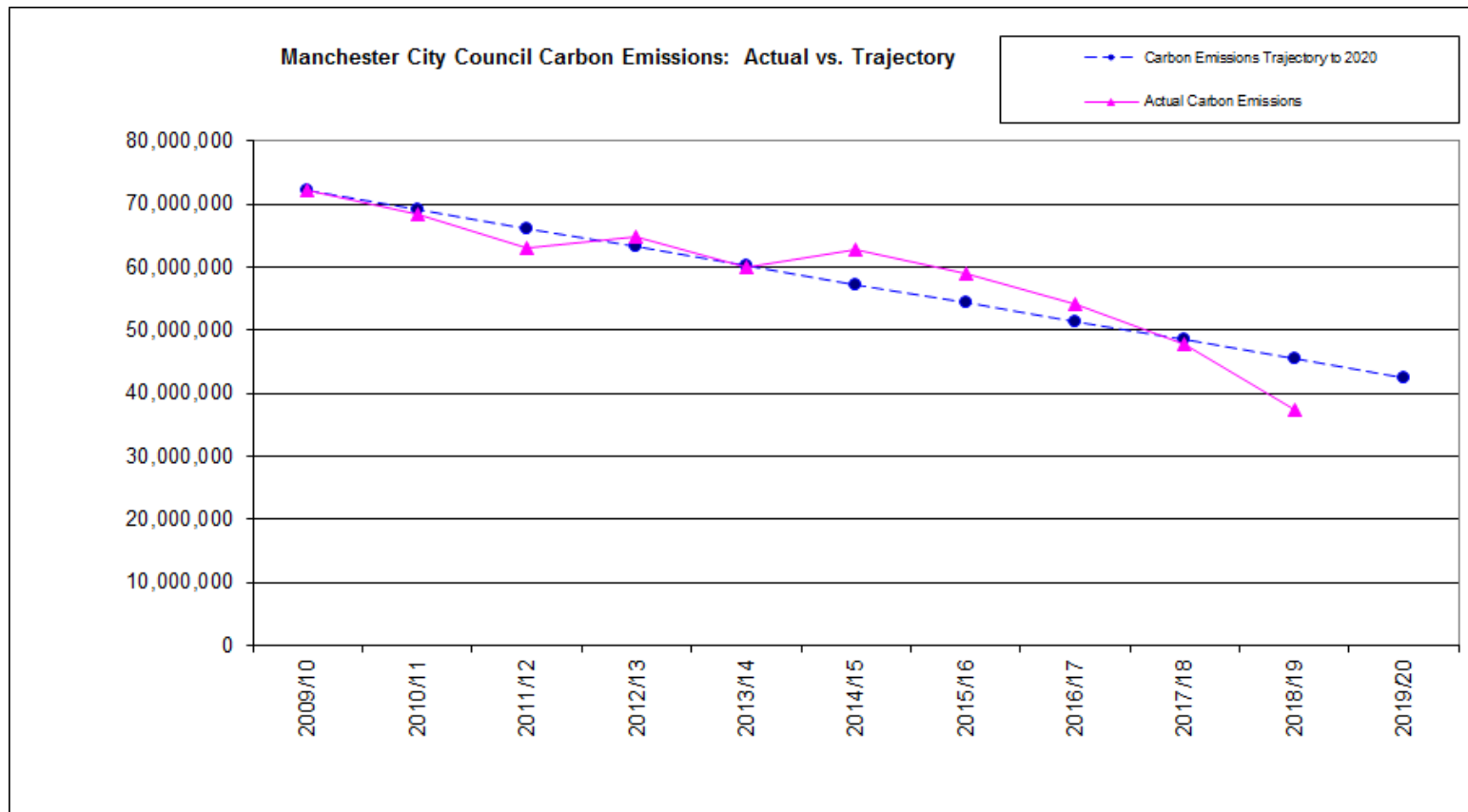


(N.B. Between 2009/10 and 2019/20 traffic signalling fell within our direct emissions. In 2018/19 traffic signalling accounted for 1% of our total direct emissions. Traffic signalling across Greater Manchester is managed by Transport for Greater Manchester and included in their emissions accounting. As such Manchester City Council will no longer include traffic signalling on our direct emissions from 2020 onwards.)

2.2. What reductions have we already achieved?

Since 2009/10 we have achieved a 48.1% reduction in our carbon emissions and exceeded our original target to reduce our emissions by 41% by 2020.

Figure 2: Manchester City Council Direct Carbon Emissions 2009/10-2018/19



A range of activities and programmes have enabled us to do this and these are:

- Delivering a street lighting replacement programme to replace all of our 57,000 street lights with energy efficient LEDs. When completed in 2020 this will save the Council £2m and 8,400 tonnes of carbon per annum.
- The first phase of the Manchester City Council Buildings Carbon Reduction Programme will see £2.6m invested in energy conservation measures and £4.3m of renewable energy production equipment at 13 buildings within the authority's estate. The investment will

generate financial savings of circa £716k per annum and reduce carbon emissions by approx. 1,600 tonnes per annum. Further stages of investments and improvements are planned.

- Committing to the installation of a Civic Quarter Heat Network which will connect the Town Hall, Town Hall Extension, Art Gallery and Central Library, Manchester Central Convention Centre, The Bridgewater Hall and Heron House. The project is expected to reduce the Council's direct carbon emissions by approximately 1,600 tonnes of CO₂ from 2020/21. The network has been designed to enable future expansion, with efficiency and carbon savings increasing as more buildings join.
- The Council's fleet currently includes one electric car and 14 small electric vans. Plans are being considered to support the roll out of electric vehicles and charging infrastructure across the estate where viable and as required. Other activities to reduce emissions from the fleet include information for drivers on fuel efficient driving techniques, reducing fuel consumption and reducing the impact on the environment. A number of electric and hybrid vehicles have been introduced to the fleet, as well as initiating a programme to exchange all vehicles Euro 5 or below, with Euro 6 engined ones.
- Approximately 700 Council staff have now received Carbon Literacy training which aims to increase their awareness of the carbon dioxide costs and impacts of everyday activities, and the ability and motivation to reduce emissions, on an individual, community and organisational basis. Large scale training sessions are now underway for the top 300 managers in the organisation along with targeted sessions focussing on specific services.

We have also played a key role in supporting others in the city to tackle climate change and improve the city's environment. Key actions include:

- Securing investment in the city for environmental projects including tree and hedge planting and community orchards
- Supporting the establishment of the Manchester Climate Change Agency and supporting the Agency through the secondment of two members of staff
- Working with Transport for Greater Manchester on the expansion of the Metrolink tram network
- Improving the city's cycling infrastructure including the Oxford Road and Wilmslow Road 'Dutch Style' cycling lanes

2.3 What have we done since declaring a climate emergency?

Since the Council declared a climate emergency on 10 July 2019, additional resources have been put in place alongside a number of changes to the way in which the Council operates. These include:

- Strengthened capacity within the Council to carry out this work and working with the Climate Change Agency to do the same

- Through the work of the Zero Carbon Coordination Group, this agenda has been embedded into decision making, policies and practice across the Council, for example the updated Capital Strategy, evaluation within procurement decisions and new staff travel policy
- Leadership across the city through the work of the Manchester Climate Change Agency and the action plans being developed by partners across the city. External engagement includes with Greater Manchester Combined Authority, Transport for Greater Manchester, development of the Our Manchester Industrial Strategy, consultation on the Manchester Local Plan, and with partners on specific projects such as Triangulum, with the University of Manchester, Manchester Metropolitan University and Siemens UK
- Clearly embedding Climate Change into the next Capital Strategy for the city so that investment decisions are additionally considered in terms of their contribution to reducing carbon reductions. The Council has already committed significant investments totalling £69 million including the Carbon Reduction Plan for the Council's operational estate, the Civic Quarter Heat Network, and the Street Lighting replacement programme.
- Engagement and awareness raising, including carbon literacy training for all Council staff and key partners, sessions at the Council's Leadership Summit which 400 senior officers attended, and the rolling programme of Listening in Action events for all staff
- Youth Climate Summit in January 2020 as a follow up to the event in July 2019.
- Written to the Greater Manchester Pension Fund to request that they divest from investing in fossil fuels.
- Called for Transport for Greater Manchester to develop a decarbonisation plan for transport which was discussed at the Greater Manchester Transport Committee.
- Events in wards have identified ways to engage communities and have identified Climate Change priorities to be considered for refreshed Ward Plans from April / May 2020.

3. What are we committing to?

3.1 Direct emissions

The Council is committed to playing its full part in helping the city transition to zero carbon and by helping to deliver the Manchester Climate Change Framework 2020-25 (<http://www.manchesterclimate.com/plan>). This document contains a summary of the actions the city needs to take to stay within our carbon budget and is informed by analysis from the Tyndall Centre for Climate Change Research, including a definition of carbon neutral.

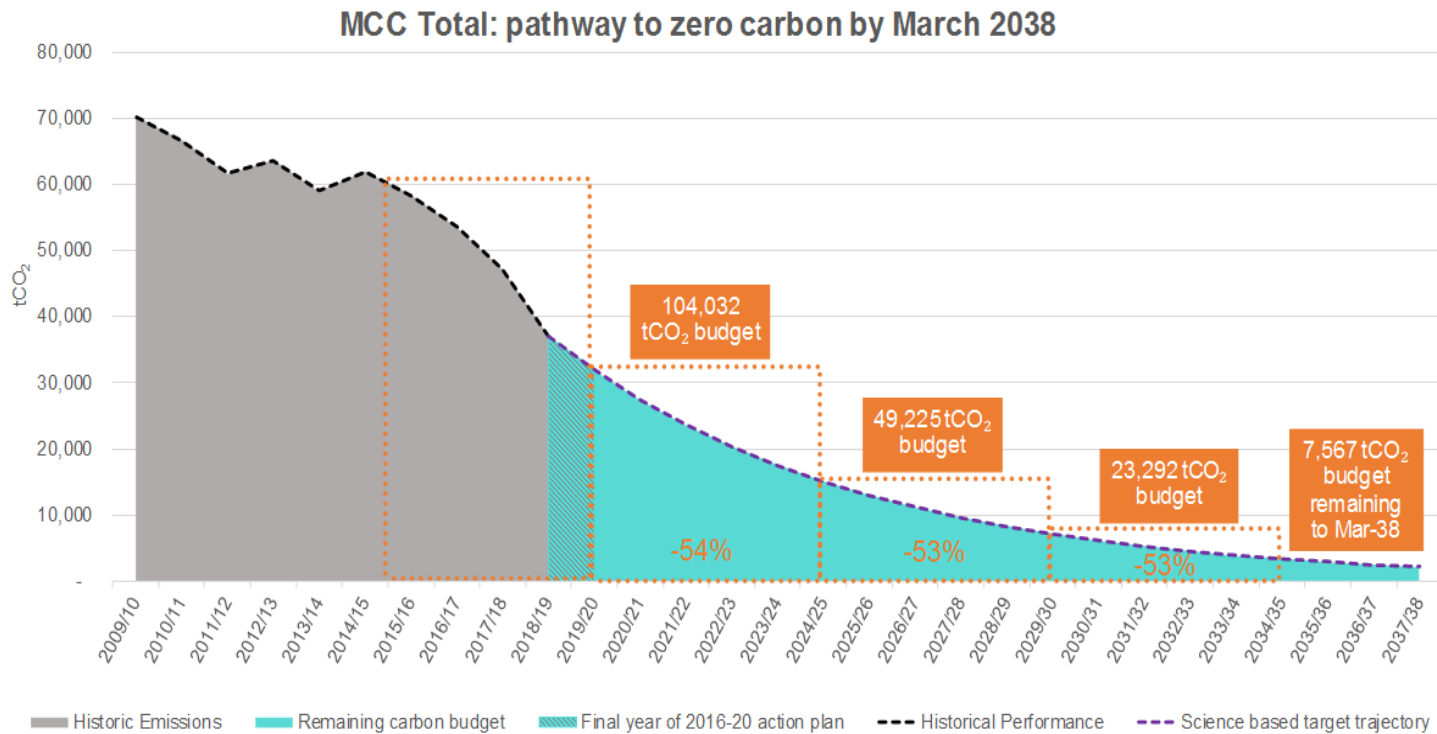
Although our plan includes investment in green and blue infrastructure to increase carbon storage and sequestration, reaching zero carbon will not include offsetting our emissions. Our ambition has been informed by the SCATTER project (Setting City and Area Targets and Trajectories for Emissions Reductions) which is a model that helps cities set zero carbon targets from our buildings, energy and transport which are consistent with delivering the Paris Agreement.

The specific commitments we are making as a Council are:

- To set our own organisational carbon budget between 2020 and 2100
- Deliver at least a 50% reduction in carbon emissions from our buildings, energy and transport by 2025
- Become zero carbon by 2038 at the latest (based on the Tyndall Centre for Climate Research definition of zero which is at least a 95% reduction)

The draft analysis below sets out how this pathway might be achieved.

Figure 3: Manchester City Council pathway to zero carbon (draft analysis)



Source: Manchester City Council

Reduction % estimates represent the average (mean) emissions of each 5 year carbon budget period compared against previous 5 year carbon budget period average

Nb: This chart is a draft and will be updated following the publication of the final Manchester Climate Change Framework 2020-25 and the Council's 2019/20 annual emissions data.

3.2 Indirect or consumption based emissions

The Council also recognises that the products and services that we purchase directly or that our supply chain procure have a major impact on the environment. The action plan commits us to reducing the impact of carbon emissions from our indirect activity.

The Council has developed formal evaluation questions for suppliers that will be used in future procurements. An additional 10% climate change weighting will be applied to the scoring framework in addition to the 20% already used for scoring contributions to social value. These questions will ask suppliers how far they will reduce their carbon emissions, and how this will be monitored and reported. Alongside this will be new guidance for suppliers across the city – including other procuring organisations on the Partnership – that signposts them to sources of advice, guidance and support for reducing their carbon emissions.

3.3 Adaptation to climate change

Despite the increased international efforts to tackle climate change, we recognise that the world's climate is already changing and that adaptation is required to protect the city's people. We are committed to ensuring that climate change adaptation, including green and blue infrastructure, is included in new developments and across Council owned buildings and land.

3.4 Citywide emissions

The Council also recognises the importance of supporting and influencing our residents and organisations to take action to reduce their direct and indirect CO₂ emissions and to adapt to the changing climate. We are committed to developing the right communications and key information to them, supporting them via funding and projects where appropriate and to ensure that as an organisation we lead by example.

4. What roles does the Council have?

As outlined in section 1, the Council has a variety of different roles to fulfil to ensure that we play our full part in reducing both our direct emissions and supporting and influencing the required reduction in citywide emissions.

4.1 Enabling and Influencing Actions

The Council has a wide range of policy-making and regulatory functions. Many of these already help to incentivise and encourage low carbon behaviours and activities. In order for the Council and the city to meet the targets that have been set we will need to ensure that all key decisions the Council makes and policies and procedures we implement support this ambition. This will include grant, funding and investment decisions, procurement and commissioning, our capital and revenue gateway process, new build and refurbishment standards, design standards, leases or developments on Council owned land, the Local Plan and staff and member travel policy. These also provide the opportunity to influence how other large and small organisations in the city and beyond operate and to encourage them to work towards the zero carbon target.

Manchester City Council only has direct control over a small percentage of emissions in the city (our direct emissions). It is therefore important that the Council works with and influence others to also play their full part in responding to the climate emergency. This will be vital in the wider city achieving its zero carbon ambitions. We will work with and exert our influence on as many organisations and individuals as possible in the way services are designed, delivered and communicated and create opportunities to encourage and support partners and residents to play a key role in achieving the city's climate change objectives. Different measures can support and influence different groups of stakeholders – residents and customers, visitors to the city, businesses in the supply chain, partner organisations in whose operations the Council has an interest, neighbouring authorities in Greater Manchester and beyond, the Government and international interests.

4.2 Direct Emissions (Scope 1 and 2)

The Council's direct emissions make up approximately 2% of the citywide emissions. Despite this, the Council is one of the largest emitters in the city. Reducing our direct emissions to zero will entail undertaking major programmes of work to our buildings and changing energy supply. Our waste fleets and other ways in which we travel whilst delivering services across the city also needs to change. We will need to focus our limited resources on those activities which produce the greatest CO₂ emissions. In addition to the investment and activity required in-house, we also recognise that we will be able to benefit from national policy via the continued decarbonisation of the grid and the continued reduction in the electricity emission factor, alongside other new developments including changes to the way in which domestic and commercial buildings are heated.

4.3 Indirect Emissions (Scope 3)

Indirect emissions are those which we do not have direct control over and are a consequence of our activities. This can include waste, water, procurement of goods and services and staff commuting, amongst other activities.

5. What is included in the 2020-25 Action Plan?

We recognise that in order to achieve our ambitions, rapid and unprecedented changes to Council services and operations will need to take place. This action plan details the activity that we will undertake over the next five years but also includes activities that will need to be developed and investigated further in order to ensure that we are on the right path to being zero carbon by 2038. The actions include activities to deliver a reduction in emissions from energy, transport and consumption (mitigation) but also adaptation and promoting investment in nature based solutions and green infrastructure

This action plan will evolve over time and be flexible enough to adapt to opportunities and challenges outside of our control such as national government policy and funding, world energy markets and technological innovations. This will provide us with the option to incorporate new actions to the plan as opportunities become available. Conversely, we may also determine that current actions will no longer deliver us the required saving and as such can be removed. Where changes in the Greater Manchester Combined Authority or government policy are needed to help us meet our objectives and targets we will proactively ask for them, seeking to work as a key partner with the government in helping to meet the UK's zero carbon commitments.

The plan is a key part of the [Our Manchester Strategy](#) 10 year vision for the city and should therefore be viewed alongside the city's collective ambitions for a thriving and sustainable city, a highly skilled city, a more progressive and equitable city, a more connected city and a more liveable city. The focus therefore, will be ensuring that the transition to zero carbon is one that is as just and fair as possible for the city's residents, businesses and workers and that the costs do not fall unevenly on those that are least able to afford them.

The action plan is appended below but is divided up into the following sections:

- Buildings and energy;
- Transport and travel;
- Reducing consumption based emissions and influencing suppliers;
- Climate adaptation, carbon storage and carbon sequestration;

- Influencing behaviour and being a catalyst for change.

A detailed analysis of the total projected CO₂ emissions savings from the Council's commitments in the plan will be undertaken once the analysis underpinning figure 3 is complete. This will help to demonstrate how the total reduction of at least a 50% reduction in direct emissions over the next 5 years will be achieved.

6. How will we measure and report on progress?

The implementation of this action plan will be overseen by a number of different groups:

- Climate Change Sub-Group (This is an elected member led sub-group of Neighbourhoods and Environment Scrutiny Committee which is open to the public)
- Annual Monitoring and Update report to Neighbourhoods and Environment Scrutiny Committee Climate Change every July when annual emissions data is available (This is an elected member led Committee which is open to the public)
- Zero Carbon Coordination Group (This is a group of senior Council officers, chaired by the Deputy Chief Executive which was established in September 2019).

We will use the Council's website, other communications and Committee reports to provide updates on the implementation of this action plan.

The Council's web pages (www.manchester.gov.uk/zerocarbon) will be expanded to include:

- Information on the action plan and progress against delivery
- Overall number of Council staff and members who are carbon literate (no names)
- A table setting out progress against the Climate Emergency Motion
- Information about the Zero Carbon Coordination Group including relevant information which can be publicly shared
- Links to relevant Committee reports where climate change is a key focus
- Case studies on projects including street lighting LED upgrade, Civic Quarter Heat Network, specific buildings improvements.
- Quantitative data on the Council's direct emissions.

7. How will we fund the delivery of the plan?

The Council already spends a significant amount of money on improving the environment of the city through physical projects and also in terms of staff time across a range of services. Climate Change considerations will be embedded into decisions about how all resources are used across the Council as well as additional direct resource requirements.

We recognise that transitioning to zero carbon by 2038 and halving the Council's carbon emissions over the next 5 years will require significant additional capital and revenue funding but that delivering this ambition is essential and the cost of not doing so would be far greater. There are also significant opportunities to benefit from becoming a zero carbon city and these are set out in the [Delivering a More Inclusive Economy, Our Manchester Industrial Strategy](#) and the Mission Based Approach within the [Greater Manchester Local Industrial Strategy](#).

Further detailed analysis of the cost of delivering the action plan will be undertaken once it is finalised but the draft version includes a recognition of where additional revenue and capital expenditure will be required against each action. A high level summary of some of the key elements are listed below:

Revenue

- Funding for the Climate Change Agency and new Chief Executive position
- Additional programme management resources in City Policy, Corporate Estates and Facilities, and Capital Programmes
- Additional external expertise as required
- Staff training
- Tree Opportunity Mapping
- Supplier toolkit for the city to inform procurement and commissioning activity

Capital

- Retrofit of the Council's operational estate
- Energy generation and charging infrastructure including Solar PVs on suitable buildings and sites, Batteries, EV Charging Infrastructure and Heat Pumps
- Delivery of Northern and Eastern Gateway projects
- Northwards managed Council housing stock retrofit and energy generation
- Purchase of electric vehicles for the Waste and Recycling Fleet, and Council Fleet.
- Changes to way Highways projects are designed and delivered

- Investment in public transport and active travel infrastructure such as cycling and walking

8. How will the whole organisation play its full part?

The Council's Corporate Plan has been amended to include Climate Change as one of the eight priorities. We recognise that delivering the Council and citywide ambition to reduce emissions by at least 50% over the next 5 years will require collective action from across all Council departments.

We will ensure that all staff are provided with training and empowered to 'own' this agenda and embed changes into the delivery of their service. A key objective of the plan is to engage residents and neighbourhoods in a process of cultural change that embeds zero carbon thinking into the lifestyles and operations of the city. Manchester is made up of a diverse range of neighbourhoods, with a wide variety of cultures and interests. The residents and communities that make up the city are critical to our success. Much of the change required will come from residents themselves, but the Council has a key role to play, particularly in those parts of the city where there are significant numbers of people dependent upon our support.

Appendix 1: Manchester City Council Actions 2020-25 (Draft)

1. Buildings and energy

Introduction				
<p>The energy used within buildings made up 69% of the Council's direct CO₂ emissions in 2018/19 and approximately 72% of the citywide CO₂ emissions. The use of fossil fuels (particularly coal) within the National Grid has fallen significantly in recent years as the grid has become decarbonised. Renewable energy such as wind, solar and hydro only represented 2.3% of the UK power supply in 1990 but now contributes 26.5%. Further decarbonisation of the National Grid will deliver significant reductions to the Council's and the city's carbon emissions but local action is needed to reduce the use of energy via the retrofitting and refurbishment of buildings, and generating energy through a variety of renewable sources.</p>				
Commitment				
<p>Reduce the CO₂ emissions from the Council's operational estate and streetlighting by at least 50% by 2025 and put in place plans for a further 50% reduction between 2025 and 2030. Support building retrofit and energy generation across the city's buildings and ensure all future development across the city is as close to zero carbon as possible.</p>				
Council				
Ref	Action	Owner	Capital Investment required	Revenue investment required
1.1	Deliver..... Complete Phase 1 and Phase 2 of the Carbon Reduction Plan and secure funding and delivery mechanism for future phases which will run from 2020-25. The 'reduce, produce, connect' approach will be utilised including the following activities: Phase 3 retrofit programme; a Zero-Carbon Building retrofit (pilot project);	Corporate Estate and Facilities	Yes	Yes

	<p>a Building Management System programme; Solar PV generation programme on buildings; Boiler replacement programme / gas phase out (heat pumps)</p> <p>To achieve.....15,000 tonnes of CO₂ will be saved from across the Council's operational estate between 2020 and 2025. A further scope of work will be developed to deliver a further saving of 7,500 tonnes of CO₂ delivering a combined 22,500 tonnes over the next 10 years.</p> <p>By.....There will be a sequenced approach to delivery across the operational estate, completed in line with the agreed carbon budget. March 2020-2025 and March 2025-2030.</p>			
1.2	<p>Deliver.....A Manchester Build Standard / Standards to be used going forward for new buildings, extensions and refurbishments and embed within decision making processes.</p> <p>To achieve.....Lower carbon construction and more energy efficient end use in buildings.</p> <p>By.....End of 2020</p>	Capital Programmes	Yes	Yes
1.3	<p>Deliver.....A Buildings and Energy Strategy for the Council.</p> <p>To achieve.....An agreed strategy setting out the response to the climate emergency across the Council's operational estate including continued procurement of green energy, infrastructure to support the roll out of electric vehicles, generation and storage.</p> <p>By.....April 2020</p>	Corporate Estate and Facilities; and Energy Management Unit	No	No

1.4	<p>Deliver.....A feasibility and business case for a large scale energy generation scheme from large scale Solar PV and Onshore and Offshore Wind on Council land and buildings, or sites in third party ownership. This will include an assessment of the different business models available in terms of capital cost, commercial risk and speed of deliverability.</p> <p>To achieve.....An understanding of the benefits, viability, costs and risks of investing in large scale energy generation to generate zero carbon energy.</p> <p>By.....December 2020</p>	Corporate Estates and Neighbourhoods	No	Yes
1.5	<p>Deliver.....Complete roll out of Street lighting LED replacement and investigate ways to further reduce consumption and improve efficiency.</p> <p>To achieve.....8,400 tonnes of CO₂ per annum</p> <p>By.....End of 2020</p>	Neighbourhoods	No	Yes
1.6	<p>Deliver.....Complete the Civic Quarter Heat Network (CQHN) and connect to all buildings including the Town Hall in 2023/24.</p> <p>To achieve.....1,600 tonnes CO₂ per annum from 2020/21 and at least 6,400 tonnes CO₂ between 2020-25.</p> <p>By.....First year of operation will be 2021. Town Hall to connect in 2023/24.</p>	CQHN Board	No	No
City				
Ref	Action	Owner		

1.7	<p>Deliver.....Undertake a stock condition survey across the Private Rented Sector and develop a segmentation approach to domestic properties including social housing, owner occupier and private rented sector. Work with Manchester Housing Providers Partnership and their Zero Carbon Working Group to ensure all social housing properties are on a path to zero carbon.</p> <p>To achieve.....A better understanding of the energy efficiency requirements and interventions required across the city's housing stock. To provide intelligence to develop funding proposals for retrofit, energy generation and future heating solutions.</p> <p>By.....Stock condition survey completed 2021.</p>	Housing and Residential Growth	Yes	Yes
1.8	<p>Deliver.....A comprehensive investment programme to deliver energy efficiency, retrofit and energy generation from solar panels and heat pumps across all of the Council owned properties managed by Northwards Housing.</p> <p>To achieve.....A reduction in emissions and energy bills for residents.</p> <p>By.....TBC</p>	Housing and Residential Growth	Yes	Yes
1.9	<p>Deliver.....Funding programmes in partnership with the Greater Manchester Combined Authority and Government to support retrofit and energy generation across commercial and non-residential buildings.</p> <p>To achieve.....A reduction in emissions and energy bills for businesses and organisations.</p> <p>By.....TBC</p>	Housing and Residential Growth, Finance	Yes	Yes
1.10	<p>Deliver.....A Local Energy Plan for Manchester via the Greater Manchester Local Energy Market project.</p>	Corporate Estates and Facilities	No	Yes

	<p>To achieve.....The Plan will identify areas suitable for Solar PV deployment (domestic and non-domestic), battery storage, low carbon heating solutions, electric vehicle deployment.</p> <p>By.....TBC</p>			
1.11	<p>Deliver.....Zero carbon commitments are taken into account when any Council owned buildings or land is disposed of or leased to a third party.</p> <p>To achieve.....Better support for third parties to improve the energy efficiency and condition of the building or the end use of the land.</p> <p>By.....2020</p>	Strategic Development	No	No
1.12	<p>Deliver.....A new Local Plan, utilisation of existing Planning levers and Strategic Regeneration Frameworks to support the city's zero carbon commitments.</p> <p>To achieve.....Use the Council's policy levers and influence to ensure that future development reflects the city's zero carbon commitments and promotes a reduction in carbon emissions, improved green and blue infrastructure, and other associated issues such as the management of grey water.</p> <p>By.....Local Plan completed by 2023. Existing Planning levers and Strategic Regeneration Frameworks immediately.</p>	Strategic Development; Planning and City Policy	No	Yes
1.13	<p>Deliver.....Partnership work with local and national experts including the UK Green Building Council and property developers.</p> <p>To achieve.....Learning from best practice in building design to ensure that we are able to achieve the best possible standards in new design with respect to carbon performance.</p>	Capital Programmes	No	No

	By.....Ongoing			
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2. Transport and travel

Introduction				
<p>Transport is a major contributor to the city's CO₂ emissions with just under 30% of total emissions and also impacts on the cleanliness of the city's air. It is also the sector which has seen the least progress in achieving reductions in carbon emissions over recent years. The Council's direct emissions include the waste and recycling fleet (8.3%) and Manchester City Council fleet (2.3%) and staff travel (1.8%). There is an urgent need to shift to sustainable and active travel for Council staff and the city's residents, workers and visitors to reduce CO₂ emissions, improve air quality and improve the city's liveability.</p>				
Commitment				
<p>Reduce the emissions from the Council's transport related emissions by 50% between 2020 and 2025 by rolling out electric vehicles and charging infrastructure. Support shift to sustainable and active travel through the Council's role in transport planning and work with Transport for Greater Manchester, Greater Manchester Combined Authority and national government to deliver strategic transport infrastructure projects.</p>				
Council				
Ref	Action	Owner	Capital Investment required	Revenue investment required
2.1	Deliver..... Develop business case and funding to replace half the Biffa waste and recycling fleet with Electric Vehicles alongside associated charging infrastructure. Develop a business case to replace the Council's fleet vehicles with Electric Vehicles. .	Neighbourhoods	Yes	Yes

	<p>To achieve....Significant reduction in emissions from diesel fleet vehicles and improved air quality. Ethical procurement of Electric Vehicle batteries to include consideration of environmental and social impact of lithium batteries.</p> <p>By.....Business case for waste fleet early 2020 and funding in 2020/21.</p>			
2.2	<p>Deliver.....A new Business Travel Policy for Council officers and elected members.</p> <p>To achieve.....Influence over travel choices and promoting sustainable and active travel. Clear communication of Council policy and approval process for travel by taxi and air travel.</p> <p>By.....April 2020</p>	Human Resources Occupational Development (HROD)	No	No
City				
Ref	Action	Owner	Capital Investment required	Revenue investment required
2.3	<p>Deliver.....Work with Greater Manchester Combined Authority, Transport for Greater Manchester and Government to implement the Greater Manchester Transport Strategy 2040 and deliver improvements to the city's Strategic Transport Infrastructure.</p> <p>To achieve.....Strategic projects include: preparations for High Speed 2; delivery mechanism and funding for Northern Powerhouse Rail; Metrolink expansion including Tram-Train options; Bus Reform including developing a business case to shift to an entirely electric fleet; Clean Air Zone; infrastructure and signage to support active travel and Beelines.</p> <p>By.....Ongoing</p>	City Policy; Highways	Yes	Yes

2.4	<p>Deliver.....A revised City Centre Transport Strategy with Transport for Greater Manchester and Salford City Council.</p> <p>To achieve..... Improvements to sustainable and active travel and prioritisation of pedestrians and cyclists.</p> <p>By.....2020</p>	City Policy; City Centre Regeneration	No	Yes
2.5	<p>Deliver.....Review and act on the findings of the Tyndall Centre for Climate Research to assess how emissions from Manchester Airport can be managed in line with the Paris Agreement. Work with Manchester Airport Group and other local authorities with airports within their boundaries to lobby government to increase the decarbonisation of air travel.</p> <p>To achieve.....A reduction in aviation emissions from Manchester Airport which is in line with the findings of the Tyndall Centre for Climate Research.</p> <p>By.....Ongoing</p>	City Policy; Manchester Climate Change Agency	No	No

3. Reducing consumption based emissions and influencing suppliers

Introduction
The Council and the city need to reduce consumption of goods and products which have the highest carbon footprint. This requires behaviour change and shifts to what we buy/procure and from where.
Commitment

Reduce the consumption on Council premises of single use plastics and other goods which are unsustainable. Influence city through procurement and commissioning and other levers including licensing				
Council				
Ref	Action	Owner	Capital Investment required	Revenue investment required
3.1	<p>Deliver.....Roll out the additional 10% social value weighting for the environment to take the total social value to 30%. Suppliers will be scored based on:</p> <ol style="list-style-type: none"> 1. The steps that they are already taking to reduce their carbon emissions and their future plans; 2. How they monitor their carbon emissions and how they plan to monitor them in the future including during the contract period. <p>To achieve.....Influencing supplier behaviour and reducing carbon emissions from the Council's procurement and commissioning.</p> <p>By.....April 2020</p>	Integrated Commissioning and Procurement	No	No
3.2	<p>Deliver.....Act on the findings of the Tyndall Centre for Climate Change Research into the city's consumption emissions and use this intelligence to inform the specification of tenders for goods and services.</p> <p>To achieve.....A reduction in indirect emissions from the Council's procurement and commissioning activity including consideration of food; water, construction materials; furniture; and ICT equipment.</p> <p>By.....December 2020</p>	Integrated Commissioning and Procurement	No	Possibly

3.3	<p>Deliver.....Ensure the Council's operational estate and markets are Single Use Plastic Free and that procurement and commissioning reduce their use alongside other packaging.</p> <p>To achieve.....A reduction in the use of Single Use Plastics.</p> <p>By.....Single Use Plastic Free by 2024</p>	Corporate Estates, Facilities and Neighbourhoods	No	No
City				
Ref	Action	Owner	Capital Investment required	Revenue investment required
3.4	<p>Deliver.....Fund the development of a citywide supplier toolkit focussed on tackling climate change.</p> <p>To achieve.....A shared approach to procurement and commissioning which can be used by stakeholders in the city to provide guidance and support for suppliers.</p> <p>By.....December 2020</p>	Policy, Performance and Reform	No	Yes
3.5	<p>Deliver.....Use other levers available to the Council to reduce the use of Single Use Plastics through licensing and events on Council owned land. Continue to roll out the use of sustainable events guides.</p> <p>To achieve.....A reduction in consumption based emissions across the city and promotion of more sustainable events.</p> <p>By.....Ongoing</p>	Neighbourhoods (Parks, Leisure and Events).	No	No
3.6	<p>Deliver.....Work with Manchester Health and Care Commissioning and FoodSync to deliver the priorities of the Manchester Food Board.</p>	Manchester Health and Care	No	No

	<p>To achieve.....The establishment of a more economically, socially and environmentally sustainable food system for Manchester.</p> <p>By.....Ongoing</p>	Commissioning		
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4. Climate adaptation, carbon storage and carbon sequestration

<p>Introduction</p>
<p>Adaptation to climate change requires changes to the way in which the city’s infrastructure is developed and how we manage issues such as flooding and extreme heat. Manchester has approximately 1.2 million trees and a tree coverage of over 20% which is one of the highest in Greater Manchester. In the last three years alone over 10,500 trees have been planted as well as nearly 3,000 hedge trees and 13 community orchards (bringing the total up to 48). The Manchester i-trees eco assessment undertaken in 2018 by Treeconomics found that Manchester’s existing tree coverage stores 124,330 tonnes of carbon, sequesters 4,980 tonnes of carbon every year and removes 84 tonnes of pollution. The financial benefits of trees are worth over £3million every year. Improving the quality and quantity of trees and hedgerows will increase the volume of carbon that can be stored and ultimately sequestered whilst also improving the environment and helping to reduce flooding.</p>
<p>Commitment</p>
<p>Ensure that the city’s infrastructure is resilient to climate change and that nature based solutions are used to combat issues such as flooding. Develop an intelligence led approach to tree and hedge planting, and nature based solutions will be developed to support the delivery of the Green and Blue Infrastructure Strategy. The quality and quantity of trees and hedges both on Council owned land and across the city will be informed by a Tree Opportunity Mapping assessment which will use the i-Trees Eco Assessment work to identify appropriate locations for additional tree planting to take place. It will link tree planting opportunities with locations that would benefit from increased climate change resilience. The assessment will suggest appropriate tree species and support funding bids to facilitate the delivery of both tree planting and ongoing maintenance.</p>

Council				
Ref	Action	Owner	Capital Investment required	Revenue investment required
4.1	<p>Deliver.....The Manchester Tree Action Plan</p> <p>To achieve.....A target of 1,000 new trees, 1,000 new hedge trees and 4 community orchards a year. Investigate opportunities for planting in parks, Council owned open spaces, highways and the grounds of buildings.</p> <p>By.....Ongoing</p>	City Policy; Neighbourhoods	Yes	Yes
4.2	<p>Deliver.....Complete the Horizon 2020 Grow Green Project and the new 'sponge' park in West Gorton to and use the learning to inform green and blue infrastructure across the city.</p> <p>To achieve.....Encourage nature based solutions to be embedded in open spaces, highways schemes and new residential and commercial developments.</p> <p>By.....Ongoing</p>	City Policy	Yes	Yes
City				
Ref	Action	Owner	Capital Investment required	Revenue investment required
4.3	<p>Deliver.....Fund and commission a Tree Opportunity Mapping assessment of tree planting opportunities within existing woodland (and particularly those affected by Ash Dieback), within parks, along streets and within gardens.</p>	City Policy	No	Yes

	<p>To achieve.....This evidence will underpin work at a neighbourhood level by identifying local opportunities for planting and supporting funding bids. The mapping will include an assessment of which are the most appropriate species for carbon storage and sequestration.</p> <p>By.....December 2020</p>			
4.4	<p>Deliver.....Additional citywide funding for the tree planting to deliver 4.3</p> <p>To achieve.....Maximising the Council's contribution to the City of Trees (https://www.cityoftrees.org.uk/) 3 million trees target as part of the Northern Forest.</p> <p>By.....Funding put in place during 2021</p>	City Policy	Yes	Yes

5. Influencing behaviour and being a catalyst for change

<p>Introduction</p>
<p>Although the Council's direct CO₂ emissions make up approximately 2% of the city's total emissions, the Council has a unique role within the city to lead by example and also influence the behaviour of a range of different cohorts. Influencing positive behaviour change in Manchester's residents, workers and visitors and also influencing behaviours, policies and investments at a city region and national level will support the climate change agenda.</p>
<p>Commitment</p>
<p>To use every opportunity to engage, empower and equip Council staff and elected members with the knowledge and skills to make a positive difference. Influence behaviour change across the city's residents, businesses, public sector organisations, voluntary and community sector and</p>

visitors. Develop clear positions to influence and lobby Greater Manchester and UK Government to take more action to tackle the climate emergency.				
Council				
Ref	Action	Owner	Capital Investment required	Revenue investment required
5.1	<p>Deliver.....Roll out carbon literacy training across the Council using a pyramid approach with universal introductory e-learning module (or equivalent for staff with ICT access), 1 day equivalent Our Climate, Our City on a targeted basis working with specific services, elected members and the most senior 300 managers in the Council. Utilise internal communications and the Intranet to share information and promote behaviour change and action.</p> <p>To achieve.....A fully informed workforce who are able to support embedding climate change action within the organisation and across the city.</p> <p>By.....Training programme rolled out throughout 2020. E-learning module rolled out universally with 1 day training on a targeted basis.</p>	Human Resources and Occupational Development	No	Yes
5.2	<p>Deliver.....Roll out the additional 10% social value weighting for the environment to take the total social value to 30%. Launch this and update the suppliers and commissioners toolkits.</p> <p>To achieve.....Influence the behaviours and activities of new and existing suppliers through the Council's procurement and commissioning activity.</p> <p>By.....April 2020</p>	Integrated Commissioning and Procurement	No	No

5.3	<p>Deliver.....Continually review the revenue and capital gateway decision making processes and build addressing climate change into the grants to Voluntary and Community Sector organisations and cultural organisations.</p> <p>To achieve.....Use the Council's decision making and instruments to influence change within the Council and across the city.</p> <p>By.....Ongoing</p>	Finance, Governance and Scrutiny	No	No
City, Greater Manchester and National				
Ref	Action	Owner	Capital Investment required	Revenue investment required
5.4	<p>Deliver.....Work with Manchester Climate Change Agency and other partners to establish a citywide programme of community engagement activities. Include development of climate change actions in all 32 Ward Plans and use Neighbourhood Investment Funding and the Our Manchester Challenge Fund to support projects which will affect positive change.</p> <p>To achieve.....Support community groups and residents to engage in the climate change agenda and build their capacity to take positive local action.</p> <p>By.....Ward Plans by April 2020.</p>	Neighbourhoods	No	Yes
5.5	<p>Deliver.....A citywide communications strategy and campaign to raise awareness, promote positive behaviour change and share examples of projects.</p> <p>To achieve.....Promote positive action and behaviour change across the city's residents, workers, businesses and visitors.</p> <p>By.....April 2020</p>	Communications	No	Yes

5.5	<p>Deliver..... Continue to provide existing funding to the Manchester Climate Change Agency, underwrite the funding for a new Chief Executive and working with partners to secure additional funding.</p> <p>To achieve.....A Manchester Climate Change Agency which is fit for purpose to effectively champion and drive forward citywide climate change action.</p> <p>By.....December 2020</p>	City Policy	No	Yes
5.5	<p>Deliver.....A plan for engaging, supporting and influencing key Manchester stakeholders (including businesses) to reduce their carbon footprint and sign up to the zero carbon ambition. This will include anchor institutions such as health partners and universities, and strategic development partners. Use the Council's membership of the Oxford Road Corridor Partnership to fully implement and embed the learning from the Horizon 2020 Triangulum project and work up plans for a zero carbon corridor.</p> <p>To achieve.....Support the work of the Manchester Climate Change Partnership as the city's principal mechanism for engaging, mobilising and supporting organisations across the city. Influencing and supporting key stakeholders to reduce their carbon emissions and identifying Council actions that will unblock barriers to enable them to accelerate action.</p> <p>By.....December 2020</p>	City Policy	No	No
5.6	<p>Deliver.....A large scale event with the city's schools to support them to take action on climate change.</p> <p>To achieve.....Additional knowledge and capacity across the city's schools to develop and implement their own bespoke climate change action plans and improvements to their buildings.</p> <p>By.....July 2020</p>	Education, City Policy	No	Yes

5.7	<p>Deliver.....Use the Council’s representatives and senior officers and elected members to influence the Greater Manchester Pension Fund; Greater Manchester Combined Authority; Greater Manchester Chamber of Commerce; Transport for Greater Manchester and the GM Transport Committee; Health and Social Care Partnership.</p> <p>To achieve.....Influence key Greater Manchester organisations to decarbonise and promote sustainable behaviour, investments and decision making to help deliver the city’s climate change ambitions.</p> <p>By.....Ongoing</p>	City Policy	No	No
5.8	<p>Deliver..... Develop a proposition to government in relation to COP26 being held in Glasgow in November 2020. This will include working through partnerships with other authorities via the Council’s membership of Core Cities UK, with other local authority areas with airports, through the Convention of the North and directly to the government.</p> <p>To achieve....Influence and work in partnership with government to ensure that Manchester (and other UK cities) can meet local climate change objectives and contribute to the UK’s zero carbon commitment.</p> <p>By.....November 2020</p>	City Policy	No	No
5.9	<p>Deliver.....Work with Manchester Climate Change Agency to actively participate in international networks and projects to identify and develop best practice that can be used to accelerate action in Manchester. Including but not limited to:</p> <ul style="list-style-type: none"> ● Covenant of Mayors ● Eurocities ● URBACT Zero Carbon Cities (2020-22) ● C-Change 	City Policy	No	No

	<p>To achieve.....Learning from other cities who are delivering ambitious climate change programmes and use funding to build capacity within the Council and city. Share Manchester’s learning to support other cities through programmes such as Zero Carbon Cities.</p> <p>By.....Ongoing</p>			
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