

**Manchester Health and Wellbeing Board  
Report for Information**

**Report to:** Manchester Health and Wellbeing Board – 3 November 2021

**Subject:** Manchester Climate Change Framework 2.0

**Report of:** Director, Manchester Climate Change Agency

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**Summary**

The purpose of the report is to highlight the increasing evidence of a strong correlation between climate vulnerability and health inequalities, to provide an update on the refresh of the city’s Climate Change Framework (Framework 2.0) and to seek guidance on the best way to bring expert advice on Health & Wellbeing into the Framework refresh, both in the short and longer term.

**Recommendations**

The Board is asked to:

1. Note the recent publication of a number of key reports that provide evidence of a strong link between climate vulnerability and health inequality.
  2. Provide a view on the most appropriate way to secure expert input from this Board to the Climate Change Framework 2.0 and its ongoing delivery.
  3. Provide feedback on the type of indicators that could be adopted to show progress on addressing climate change and health inequalities.
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**Board Priority(s) Addressed:**

<b>Health and Wellbeing Strategy priority</b>	<b>Summary of contribution to the strategy</b>
Getting the youngest people in our communities off to the best start	<p>The MCCA objective for 2020-25 is:</p> <p><i>To improve the health and wellbeing of everyone in Manchester through actions that also contribute to our objectives for CO<sub>2</sub> reduction and adaption and resilience, with particular focus on those most in need.</i></p> <p>This objective provides good alignment with the Board’s priorities.</p>
Improving people’s mental health and wellbeing	
Bringing people into employment and ensuring good work for all	
Enabling people to keep well and live independently as they grow older	
Turning round the lives of troubled families as part of the Confident and Achieving Manchester programme	
One health and care system – right care, right place, right time	
Self-care	

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**Background documents (available for public inspection):**

The following documents disclose important facts on which the report is based and have been relied upon in preparing the report. Copies of the background documents are available up to 4 years after the date of the meeting. If you would like a copy please contact one of the contact officers above.

The Manchester Climate Change Framework 2020-25:  
<https://www.manchesterclimate.com/sites/default/files/Manchester%20Climate%20Change%20Framework%202020-25.pdf>

There are references to published documents throughout the report.

## 1.0 Introduction

1.1 The Our Manchester Strategy sets out the commitment that *'Manchester will play its full part in limiting the impacts of climate change.'*

1.2 The responsibility for developing and facilitating the delivery of the citywide strategy to fulfil this commitment is devolved to the Manchester Climate Change Partnership (the Partnership, MCCP) and Manchester Climate Change Agency (the Agency, MCCA).

1.3 In February 2020, the Partnership and Agency published Version 1.0 of the Manchester Climate Change Framework 2020-25; it was endorsed by Manchester City Council's Executive in March 2020, formally establishing it as the city's climate change strategy.

1.4 The Framework's aim is:

*'Manchester will play its full part in limiting the impacts of climate change and create a healthy, green, socially just city where everyone can thrive.'*

1.5 The Framework sets out four headline objectives:

1) Staying within our carbon budgets:

'To ensure that Manchester plays its full part in helping to meet the Paris Agreement objectives by:

- keeping our direct CO<sub>2</sub> emissions within a limited carbon budget,
- taking commensurate action on aviation CO<sub>2</sub> emissions and
- addressing our indirect / consumption-based carbon emissions.'

2) Climate adaptation and resilience

'To adapt the city's buildings, infrastructure and natural environment to the changing climate and to increase the climate resilience of our residents and organisations.'

3) **Health and Wellbeing**

**'To improve the health and wellbeing of everyone in Manchester through actions that also contribute to our objectives for CO<sub>2</sub> reduction and adaption and resilience, with particular focus on those most in need.'**

4) Inclusive, Zero Carbon and Climate Resilient Economy

'To ensure that Manchester establishes an inclusive, zero carbon and climate resilient economy where everyone can benefit from playing an active role in decarbonising and adapting the city to the changing climate.'

1.6 The Framework asserted that as well as ensuring that climate action has positive health and wellbeing outcomes, this approach will also ensure that our commitment to social justice remains at the heart of what we do.

1.7 The Health & Wellbeing Board has been represented on the Partnership by Dr Raja Murugesan and the proposals in this paper build on the work carried out to date.

## **2.0 Background**

2.1 There have been a number of reports published over the last year that have emphasised the link between climate vulnerability and health inequality.

### **UK Health Expert Advisory Group**

2.2 The UK Health Expert Advisory Group was formed by the Committee on Climate Change (CCC) in 2020 to advise on developing an approach to assessing the health impacts of setting the sixth carbon budget covering 2033-2037, which will set a new path towards the target date of net-zero carbon emissions by 2050<sup>1</sup>.

2.3 The key conclusion is that climate change is already damaging the health of populations in the UK and globally and has the potential to increase health inequalities. Actions to combat climate change, done in the right way, could improve health and health equity. Conversely, actions to improve health and health equity have the potential to reduce greenhouse gas (GHG) emissions.

2.4 Direct impacts on health of climate change are created by changing exposure to heat and cold, increased exposure to UV radiation, air pollution, pollen, emerging infections, flooding and associated water-borne diseases, and the impacts of extreme weather events such as storms and floods, notably on mental health. Indirect impacts will also occur as a result of climate change's impacts on the livelihoods of individuals, on prices for food, water and domestic energy; on utilities and supply chains that are at risk from extreme weather events, on global security - and on the increasingly complex interactions between these factors.

2.5 The group identified four key areas in which action would bring benefits to public health and reduction of health inequalities whilst contributing to the mitigation of, and adaptation to, climate change: transport, buildings, diets, and sustainable economic and employment models that better support health and well-being. A further theme that ran through all of these was air pollution.

2.6 In summary the overarching actions proposed are:

- Support a just energy transition that minimises air pollution from all sources
- Design and retrofit homes to be energy efficient, climate resilient and healthy
- Build a sustainable, resilient and healthy food system

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<sup>1</sup> Sustaining Health Equity: Achieving a Net-Zero UK - <https://www.theccc.org.uk/publication/ucl-sustainable-health-equity-achieving-a-net-zero-uk/>

- Develop a transport system that promotes Active Travel and Road Safety which minimises pollution.

All of these actions form part of the Manchester Climate Change Partnership's (MCCP's) priorities for activity in 2021/22.

## **WHO – Health & Climate Change**

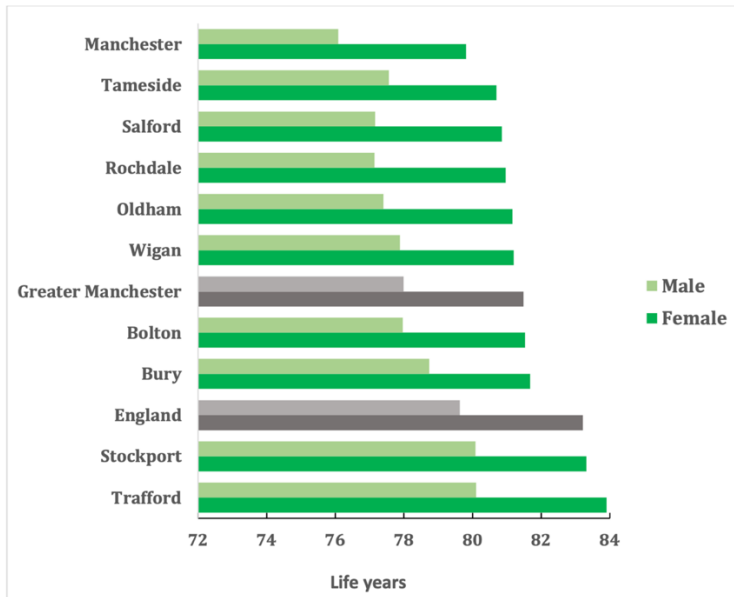
- 2.7 Climate change has the ability to seriously alter public health and has already begun to do so with the World Health Organization (WHO)<sup>2</sup> estimating that between 2030 and 2050, 250 000 people will die annually as a direct result of climate change. The WHO reports that they expect at-risk population groups such as infants and the elderly to be particularly affected, but that if climate change continues unabated, other population groups will also be affected.
- 2.8 Although global warming may bring some localized benefits, such as fewer winter deaths in temperate climates and increased food production in certain areas, the overall health effects of a changing climate are overwhelmingly negative. Climate change affects many of the social and environmental determinants of health – clean air, safe drinking water, sufficient food and secure shelter.
- 2.9 All populations will be affected by climate change, but some are more vulnerable than others. Children, in particular children living in poorer communities, are among the most vulnerable to the resulting health risks and will be exposed longer to the health consequences. The health effects are also expected to be more severe for elderly people and people with infirmities or pre-existing medical conditions. The incidence will include but not limited to: Heat Stress, Flooding, Food insecurity, Air pollution and Disease prevalence because of global warming.

## **Greater Manchester: A Marmot City Region**

- 2.10 The Marmot 10 years on review found that differences in life expectancy at birth between the least and most deprived deciles have persisted, the difference is 9.5 years for males and 7.7 years for females in 2016-18. Greater Manchester had lower life expectancies for men and women than England in 2016-18: the differences were 1.6 years less for males, and 1.7 years less for females. For Manchester itself, this gap in life expectancy almost doubled for males and females to around 3 years, see illustrative bar chart below.

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<sup>2</sup> Climate Change and Health, WHO - <https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health>



Source: ONS, 2018 (6).

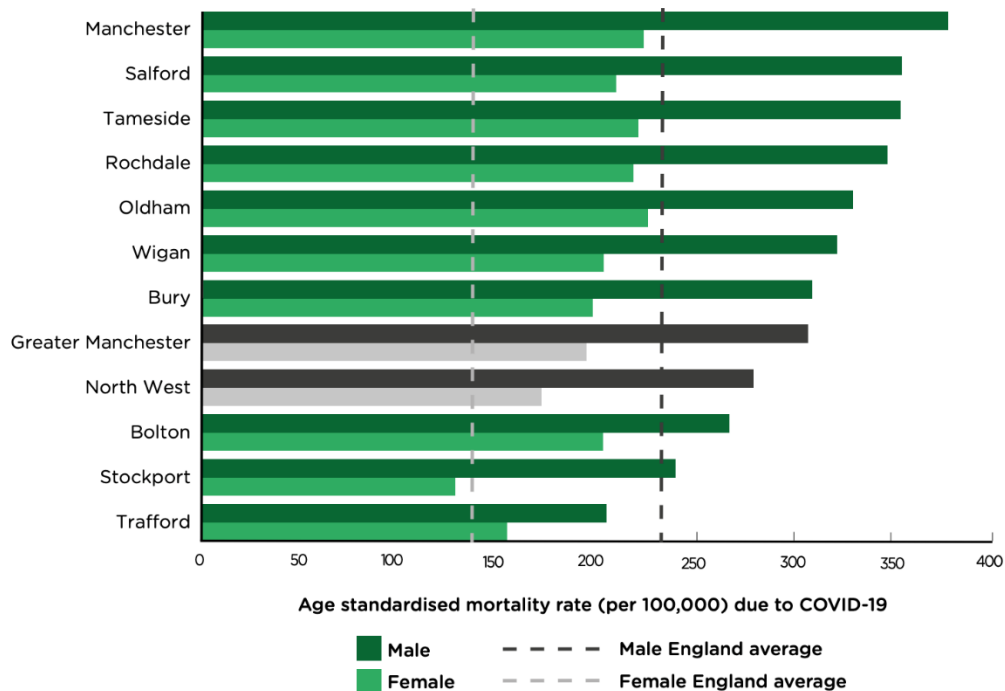
*Figure 1 Life Expectancy at Birth*

- 2.11 The Marmot Review 10 years on report describes selected outcomes for five of the six Marmot priority areas for health inequalities, as set out in the original 2010 Review. These five areas are the causes of health inequalities related to: early child development; education; good working conditions; people having enough money to live healthily on; and creating safe and healthy environments<sup>3</sup>.
- 2.12 Reflecting the view of the UK Health Expert Advisory Group, the Marmot Review confirmed that efforts to mitigate impacts of climate change and reduce greenhouse gas emission are positive for health and health inequalities.

### **The Impact of Covid**

- 2.13 The social inequity around health outcomes was sharply illustrated during the Covid-19 pandemic. In a report commissioned by the Greater Manchester Health and Social Care Partnership from Sir Michael Marmot, it was revealed that the coronavirus death rate in Greater Manchester was 25% higher than the England average during the year to March 2021, leading to “jaw-dropping” falls in life expectancy and widening social and health inequalities across the region over the past year.
- 2.14 Covid-19 mortality rates varied within the region from around 400 males per 100,000 in the poorer boroughs to fewer than 250 per 100,000 in more affluent areas. As the bar chart indicates, Manchester’s Covid mortality was the worst across Greater Manchester.

<sup>3</sup> Health Impact in Greater Manchester: The Marmot Review 10 Years On - <https://www.instituteofhealthequity.org/resources-reports/greater-manchester-evaluation-2020>



*Note: Deaths 'due to COVID-19' only include deaths where COVID-19 was the underlying (main) cause.*

*Source: ONS. Age-standardised rates from COVID-19, People, Local Authorities and Regions in England and Wales, deaths registered between March 2020 and March 2021 (15).*

**Figure 1** Age Standardised Covid-19 Mortality for Greater Manchester (March 2020 – April 2021)

2.15 The report is entitled Build Back Fairer in Greater Manchester: Health Equality and Dignified Lives<sup>4</sup> and it also detailed a series of ‘beacon indicators’ to monitor the improvement in health outcomes should further investment be made available (see below).

<sup>4</sup> <https://www.instituteoftheequity.org/resources-reports/build-back-fairer-in-greater-manchester-health-equity-and-dignified-lives>

## MARMOT BEACON INDICATORS

### Early years, children and young people

- Indicator 1: School readiness
- Indicator 2: Low wellbeing in secondary school children (#Beewell)
- Indicator 3: Pupil absences
- Indicator 4: Educational attainment by FSM eligibility

### Work and employment

- Indicator 5: NEETs at ages 18 to 24
- Indicator 6: Unemployment rate
- Indicator 7: Low earning key workers
- Indicator 8: Proportion of employed in non-permanent employment

### Income poverty and debt

- Indicator 9: Children in low income households
- Indicator 10: Proportion of households with low income
- Indicator 11: Debt data from Citizens Advice

### Housing, transport and the environment

- Indicator 12: Ratio of house price to earnings
- Indicator 13: Households/persons/children in temporary accommodation
- Indicator 14: Average public transport payments per mile travelled
- Indicator 15: Air quality breaches

### Communities and place

- Indicator 16: Feelings of safety in local area
- Indicator 17: People with different backgrounds get on well together
- Indicator 18: Antisocial behaviour

### Public health

- Indicator 19: Low self-reported health
- Indicator 20: Low wellbeing in adults
- Indicator 21: Numbers on NHS waiting list for 18 weeks
- Indicator 22: Emergency readmissions for ambulatory sensitive conditions
- Indicator 23: Adults/children obese
- Indicator 24: Smoking prevalence

## 3.0 Manchester's Climate Change Framework (Version 2.0)

- 3.1 Building on Version 1.0 of the Framework, Version 2.0 is being produced during 2021 and will include a new Implementation Plan to detail what needs to be achieved by when, i.e. quantifying the scale and pace of change required.
- 3.2 Framework 2.0 will retain the original four headline objectives: CO<sub>2</sub> reduction, climate adaptation and resilience, **health & wellbeing**, and inclusive and sustainable economy. And the original six thematic areas: buildings,



renewable energy, transport, food, things we buy and throw away, green infrastructure and nature-based solutions.

- 3.3 Consultations with residents and businesses are being carried out at two points in the process to support development of 'key actions for residents and businesses' and an understanding of the barriers that are preventing further action.
- 3.4 The Agency and Partnership are working with a range of experts on Framework 2.0 to update the case for change and to set targets for action wherever possible. For example, Anthesis, an environmental consultancy, have been procured to provide the technical evidence base around direct emissions reductions (first headline objective); Manchester Metropolitan University is working on adaptation and resilience (second headline objective); and a steering group lead by the Chamber of Commerce is supporting work on sustainable economy (fourth headline objective).
- 3.5 Input is also being provided by the existing independent Advisory Groups including the Zero Carbon group and the Adaptation and Resilience group. Going forwards, these groups will provide ongoing technical advice will track and report progress against the objectives and targets in Framework 2.0.

#### **4.0 Support Requested**

- 4.1 We are seeking support from the Health & Well Being Board with the third headline objective on **health and wellbeing**, both in terms of setting the right objectives and targets, and in tracking progress with their implementation.
- 4.2 Given the correlation between climate action and improved health outcomes, it is vitally important that organisations represented on the Board are able to contribute to this work.
- 4.3 The way in which the Framework, Partnership and Agency currently channel independent advice from the city's experts is via **dedicated Advisory Groups**.
- 4.4 Two proposals are presented for consideration, but other options may be available:
  - a) The Health & Well Being Board itself acts as the independent Advisory Group for the Climate Change Framework's third headline objective.
  - b) The Health & Well Being Board create a new sub-group of appropriate level members to be the independent Advisory group, which is then overseen by the Board.
- 4.5 The role of the Advisory Group would be, in the first instance, to ensure the **narrative** around climate, health and wellbeing is up to date in Framework 2.0 and to propose a **set of indicators** that will enable Manchester to track its progress against these shared objectives. This work would need to be

completed relatively quickly, e.g. draft in December 2021 and finalised in January 2022.

4.6 Suggested indicators for consideration include (but are not limited to):

- Marmot beacon indicator 15: air quality breaches
- Deaths from heat stress or cold spells
- People living in fuel poverty
- Asthma cases

4.7 The Advisory Group would also be called on to provide **ongoing support**. Using the Terms of Reference adopted by the other Advisory Groups as a template, this could include:

- Reviewing progress against the chosen indicators - at least once per year for the Annual Report;
- Reporting periodically to the Climate Change Partnership on activities underway in the city of relevance to the objective;
- Providing independent and objective advice to the Partnership and Agency, for example on the need to update objectives in the light of changing policy or underlying data.
- Considering the recommendation of the UK Health Expert Advisory Group to carry out health equity impact assessments.

4.8 The Advisory Group would be expected to meet four to six times per year, depending on the work programme established by the Health & Wellbeing Board and the Climate Change Partnership, and would be able to input to the specific Terms of Reference once established.