



Environment, Climate Change and Neighbourhoods Scrutiny Committee

Date: Thursday, 25 May 2023

Time: 2.00 pm

Venue: Council Antechamber, Level 2, Town Hall Extension

This is a **Supplementary Agenda** containing additional information about the business of the meeting that was not available when the agenda was published.

Access to the Antechamber

Public access to the Council Antechamber is on Level 2 of the Town Hall Extension, using the lift or stairs in the lobby of the Mount Street entrance to the Extension.

Filming and broadcast of the meeting

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Membership of the Environment, Climate Change and Neighbourhoods Scrutiny Committee

Councillors - Shilton Godwin (Chair), Chohan, Collins, Doswell, Holt, Ilyas, McCaul, Razaq, Wiest and Wright

Supplementary Agenda

5. **Manchester Climate Change Framework (2022 Update) - Progress Report** 3 - 16

Report of the Director, Manchester Climate Change Agency and the Chair, Manchester Climate Change Partnership

This report provides an overview of progress being made to deliver the recommended actions in the 2022 Update to Manchester's Climate Change Framework (2020-25) which was published in October 2022.

Further Information

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

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This supplementary agenda was issued on **Friday 19 May 2023** by the Governance and Scrutiny Support Unit, Manchester City Council, Level 2, Town Hall Extension , Manchester M60 2LA

Manchester City Council Report for Information

Report to:	Environment, Climate Change and Neighbourhoods Scrutiny Committee – 25 May 2023
Subject:	Manchester Climate Change Framework (2022 Update) – Progress Report
Report of:	Director, Manchester Climate Change Agency Chair, Manchester Climate Change Partnership

Summary

This report provides an overview of progress being made to deliver the recommended actions in the 2022 Update to Manchester's Climate Change Framework (2020-25) which was published in October 2022. It highlights:

- Some of the positive actions that have been launched or delivered across the city since October 2022 (section 3).
- Progress being made to map activity against the recommended actions put forward by the 2022 Update (section 4).
- Challenges with capturing and collating robust and meaningful data on climate change activity and emissions reductions (section 5).

Recommendations

The Committee is recommended to note the progress underway in mapping and delivering actions that support the city's climate change ambitions and the challenges associated with capturing and collating robust and quantifiable data.

Wards Affected: All

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

The Manchester Climate Change Framework 2020-25, and its 2022 Update, is the city's high-level strategy for tackling climate change. It sets out how Manchester will 'play its full part in limiting the impacts of climate change', a commitment in the Our Manchester Strategy 2016-25. The Framework's key aim is for "Manchester to play its full part in limiting the impacts of climate change and create a healthy, green, socially just city where everyone can thrive."

Equality, Diversity and Inclusion - the impact of the issues addressed in this report in meeting our Public Sector Equality Duty and broader equality commitments

Actions set out in the Manchester Climate Change Framework 2020-25, and its 2022 Update, relate to the need for just and equal delivery of climate action across Manchester. This includes areas such as community engagement, warmer homes,

accessible transport, access to green spaces and tackling fuel poverty. There is also detail in the Framework on creating a 'just transition' and a chapter on creating an inclusive, net zero and climate resilient economy.

Manchester Strategy outcomes	Summary of how this report aligns to the OMS/Contribution to the Strategy
A thriving and sustainable city: supporting a diverse and distinctive economy that creates jobs and opportunities	The Manchester Climate Change Framework has the core objective: "To ensure that Manchester establishes an inclusive, zero carbon and climate resilient economy where everyone can benefit from playing an active role in decarbonising and adapting the city to the changing climate."
A highly skilled city: world class and home grown talent sustaining the city's economic success	The Manchester Climate Change Framework notes: "By 2025 Manchester will be a key player in the global zero carbon economy, recognised as one of the best places in the world to innovate, invest and roll-out new solutions to climate change. Manchester businesses will be rewarded for their commitment to climate action by saving money, attracting talented workers and exporting their products and expertise across the UK and internationally."
A progressive and equitable city: making a positive contribution by unlocking the potential of our communities	The Manchester Climate Change Framework has the core objective: "To ensure that Manchester establishes an inclusive, zero carbon and climate resilient economy where everyone can benefit from playing an active role in decarbonising and adapting the city to the changing climate."
A liveable and low carbon city: a destination of choice to live, visit, work	The Manchester Climate Change Framework notes: "By 2025 Manchester residents will have cleaner air, be walking and cycling more, be living in more energy efficient homes, have access to high quality green spaces in their neighbourhoods, and be securing good, well-paid jobs in socially and environmentally responsible Manchester businesses."
A connected city: world class infrastructure and connectivity to drive growth	The Manchester Climate Change Framework has the core objective: "To ensure that Manchester establishes an inclusive, zero carbon and climate resilient economy where everyone can benefit from playing an active role in decarbonising and adapting the city to the changing climate"

Full details are in the body of the report, along with any implications for:

- Equal Opportunities Policy
- Risk Management
- Legal Considerations

Financial Consequences – Revenue

Delivery of the targets and recommended actions set out in the Manchester Climate Change Framework (2020-25), and its 2022 Update, will require revenue expenditure by stakeholders across the city, including the City Council.

Financial Consequences – Capital

Delivery of the targets and recommended actions set out in the Manchester Climate Change Framework (2020-25), and its 2022 Update, will require capital expenditure by stakeholders across the city, including the City Council.

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Background documents (available for public inspection):

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

- Manchester Climate Change Framework 2020-25: [Manchester Climate Change Framework 2020-25 | Manchester Climate Change](#)
- 2022 Update of Manchester's Climate Change Framework 2020-2025: <https://www.manchesterclimate.com/content/2022-update>
- Electric Vehicle Charging Strategy: [Electric vehicle charging strategy document | Manchester City Council](#)
- Manchester Active Travel Strategy: [Appendix 1 Draft Manchester Active Travel Strategy and Investment Plan.pdf](#)
- Manchester Climate Pack: [SPF City Pack editable template \(metoffice.gov.uk\)](#)
- Manchester Heat Pack: [CSSP city pack MANCHESTER \(metoffice.gov.uk\)](#)
- Manchester Urban Heat storyboard: [Urban Heat Risk in Manchester \(arcgis.com\)](#)
- Manchester Climate Ready: [MANCHESTER CLIMATE READY](#)
- Local Climate Adaptation Tool: [Local Climate Adaptation Tool \(lcat.uk\)](#)

1.0 Introduction

1.1 This report provides an overview of progress being made to deliver the recommended actions in the 2022 Update to Manchester's Climate Change Framework (2020-25) which was published in October last year. It highlights:

- Some of the positive actions that have been launched or delivered across the city since October 2022 (section 3).
- Progress being made to map activity against the recommended actions put forward by the 2022 Update (section 4).
- Challenges with capturing and collating robust and meaningful data on climate change activity and emissions reductions (section 5).

2.0 Background

2.1 The Manchester Climate Change Partnership (MCCP) and Agency (MCCA) hold responsibility for setting the city's strategy for tackling the climate emergency. In 2020 they published the Manchester Climate Change Framework (2020-25) which is the city's high-level strategy for tackling climate change.

2.2 The Framework's key aim is for "Manchester to play its full part in limiting the impacts of climate change and create a healthy, green, socially just city where everyone can thrive". This is aligned to a key commitment in the Our Manchester Strategy 2016-25.

2.3 The Framework identifies four headline objectives for the city to tackle:

- Staying within our carbon budgets
- Climate adaptation and resilience
- Health and wellbeing
- Inclusive, zero carbon and climate resilient economy.

2.4 It also identifies six priority areas for action:

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

2.5 The Framework took a science-based approach, supported by the Tyndall Centre for Climate Change Research at the University of Manchester, to setting a target for the city to reach zero carbon emissions by 2038 and allocating a total carbon budget of 15m tCO₂ for the period 2018-2100. These targets relate solely to direct, energy-related emissions from our buildings and transport. To achieve these targets, the city needs to reduce its emissions by 13% per year.

- 2.6 As reported by MCCA in the city's Annual Reports, Manchester has not been reducing its direct emissions by the targeted 13% per year and so is not currently on track to stay within its carbon budget to 2025. The Framework was updated in 2022 to provide an overview of work carried out since its publication in 2020 and to present detailed modelling of Manchester's current direct emissions and pathways to zero carbon which generated a series of granular targets on the scale of action needed to halve our direct emissions.
- 2.7 The 2022 Update also highlighted new policy drivers and enablers; key challenges and barriers to implementation; co-benefits of climate action to health, wellbeing, resilience, and economic sustainability; examples of good practice; and 175+ recommended actions that were developed in collaboration with a range of stakeholders.
- 2.8 The recommended actions were grouped according to where there is agency to act:
- To be delivered locally, where direct control lies in Manchester
 - To work on at city-region level, with Greater Manchester partners
 - To advocate for national government to do
 - To do differently, where there are opportunities to innovate
- 2.9 The recommended actions are owned by the local authority, national government and the wider public sector, private companies and third sector organisations, and communities and individuals; reflecting the fact that everyone needs to play their full part in tackling climate change.
- 2.10 There are five key messages within the 2022 Update:
- Urgent action is needed to reduce direct emissions from our buildings and ground transport, and to increase renewable energy generation, if Manchester is to stay within its carbon budget.
 - Decisive action is needed to assess the city's vulnerability to climate change and to ensure we are adapting our infrastructure, buildings, economy, and residents to be resilient to a changing climate.
 - Everyone has a role to play – individuals, organisations, local and national government – and there is a great deal we have the power to achieve locally, if we work collaboratively.
 - The cost of transitioning to a zero carbon, climate resilient city cannot be borne solely by the public purse, so we need to find innovative ways to unlock private finance investment.
 - Tackling the climate crisis brings opportunities to deliver wider strategic ambitions, including improving people's health, reducing fuel and food poverty, creating new jobs and economic growth, and delivering a greener city for everyone.

3.0 Progress Update – October 2022 to April 2023

- 3.1 This section of the report presents a high-level summary of initiatives that have been launched or delivered since publication of the 2022 Update to the Manchester Climate Change Framework in October last year.
- 3.2 It begins with actions that are connected to staying within our carbon budget - decarbonising our buildings and transport, and increasing generation of renewable energy - and runs through to actions that support a reduction in our indirect emissions, that enhance the city's ability to adapt to a changing climate and that unlock the private capital needed to deliver the transition to net zero.
- 3.3 It is not an exhaustive update covering all activity across the city, and the challenges associated with mapping, tracking, and reporting diverse and dispersed activity owned by a multitude of stakeholders are outlined in sections 4 and 5.
- 3.4 In November 2022, Manchester Climate Change Partnership established a 'City Challenge task and finish group' to assist the Local Plan in being as ambitious as possible in terms of net zero standards for new buildings.
- 3.5 The group is updating and enhancing work done in 2021 ([Roadmap to Net Zero Carbon - Report.pdf \(manchesterclimate.com\)](#)) and includes representatives from Manchester City Council's planning team. The group is chaired by the private sector and involves more than 20 representatives from the city's leading architects, developers, engineers, and financiers. They are organised around four challenge areas: ambition and targets; economic viability; market capability; and planning policy. The first output of their work will feed into the initial consultation phase of the Local Plan expected later this year. Close coordination is being maintained with Greater Manchester's Places for Everyone joint plan and the Truly Affordable Net Zero Homes taskforce, as well as the UK Net Zero Carbon Buildings Standard initiative.
- 3.6 Public sector organisations in Manchester have secured grant funding from round 3b of the UK Government's Public Sector Decarbonisation Scheme (PSDS) which closed in October 2022. To date, across three rounds of PSDS aggregated by Greater Manchester Combined Authority, over £29m of grant has been secured to support delivery of works with a value over £38m across approximately 50 buildings in the city owned/managed by Manchester City Council, Manchester College, the Royal Northern College of Music, the Manchester NHS Foundation Trust, and others. These works will implement around 120 low carbon measures which, once complete, are set to save around 4k tCO₂e each year, equivalent to over 67k tCO₂e over their lifetime.
- 3.7 Registered housing providers in Manchester have secured additional grant funding from the UK Government's Social Housing Decarbonisation Fund (SHDF). Wave two of this funding closed in November 2022 and, across both waves, it is estimated that £28m has been awarded to registered providers with stock in Manchester to support retrofit of nearly 4,000 homes, involving the

installation of more than 14,000 low carbon measures, and resulting in savings of over 20million kWh once complete.

- 3.8 In addition to wave two of SHDF, a series of other initiatives have become available since the Framework Update to support domestic retrofit. These include:
- ECO Flex: Administered by Manchester City Council, this funding targets private tenure households living in fuel poverty or on low income and aims to improve 1,200 homes through appointed delivery contractors between 2023 and 2026.
 - HUG2: Manchester City Council has secured just over £10m from the Department of Energy Security and Net Zero (formally BEIS) to provide energy efficiency upgrades and low carbon heating to households that are low income, off the gas grid and have an EPC rating between D and G between April 2023 and March 2025.
- 3.9 Work has continued to support the local uptake of Greater Manchester initiatives targeting home energy efficiency including:
- Heat pumps – Greater Manchester Combined Authority is working with Octopus Energy to identify households that could benefit from a heat pump and connect them into the Government’s boiler upgrade scheme. In February and March 2023, over 3,200 households in Manchester were contacted to promote the offer.
 - Your Home Better – an independent, low-cost service commissioned by Greater Manchester Combined Authority to support homeowners to make their home better by improving comfort and reducing energy bills. A campaign has been developed to contact 6,500 homeowners in Manchester which will be delivered in June 2023.
- 3.10 In November 2022, Manchester Climate Change Partnership established a ‘City Challenge task & finish group’ to tackle Commercial Building Retrofit. This is being delivered as a Greater Manchester initiative and involves stakeholders from across the city region.
- 3.11 The group is chaired by the private sector and involves more than 20 representatives from the city’s leading asset owners, real estate advisors, financiers, and policy makers. They are organised around four challenge areas: policy; finance and viability; technology and skills; and monitoring and verification. Close coordination is being maintained with the UK Green Building Council’s commercial retrofit taskforce.
- 3.12 In December 2022, Manchester City Council published an Electric Vehicle (EV) Charging Strategy to look at the role of the council in providing public EV infrastructure and supporting wider commercial roll out of such infrastructure. It states that, in September 2022, Manchester had 130 charging devices (public and private) and that it will need an additional 1,500-3,000 public charge points by 2030.

- 3.13 In February 2023, Manchester City Council launched an Active Travel Strategy. Its vision is that everybody in Manchester will be able to walk, wheel or cycle as part of their everyday lives – for school, work, shopping, and socialising, in safety, comfort and happiness. Its strategic ambitions are to improve access to the regional centre, district centres, parks, and other key destinations; to enable safe access to schools and colleges; to improve citywide health and wellbeing through transport investment; and to reflect the diversity of Manchester and address transport inequalities.
- 3.14 As of the end of 2022, Manchester had added 5.1MW of operational renewable energy generation capacity from solar panels (since 2019), with just over 1MW additional in construction. These figures are based on data from the UK Government’s renewable energy planning database and the MCS installations database.
- 3.15 In March 2023, Manchester Climate Change Partnership delivered a ‘peer to peer’ workshop on sustainable procurement. The intention of this model is to accelerate the decarbonisation of member organisations through sharing best practice and lessons learned. The workshop involved eight large organisations, including Manchester City Council, and enabled each to share how far they had individually progressed, what challenges had been experienced, and what benefits there could be in establishing a consistent approach to reduce the environmental impacts of local supply chains. Consultation is now underway with members to design a series of follow-on sessions to progress action.
- 3.16 Manchester City Council, MCCA and Manchester Metropolitan University have continued to collaborate with the Met Office to better understand our exposure to climate change risk and to support the development of plans that help the city to increase its resilience to climate change, ensuring we can prioritise action that protects our most vulnerable communities and systems.
- 3.17 Building on the [Manchester Climate Pack](#) which provides a high level, non-technical summary of climate change projections for the city, Manchester is one of just four UK cities to now have a [Heat Pack](#) which provides information on how extreme heat events may change this century due to climate change and how we can build our resilience to it. Additionally, Manchester is one of just three cities for whom the Met Office has combined its climate information about extreme heat events with socio-economic and geographic data to create a ‘[story map](#)’. This uses ArcGIS technology to visualise current and future heat risks at ward level including the number of summer days above 25°C and summer nights above 15°C, and a heat vulnerability index score which assesses the degree to which people or systems are at risk from extreme heat, accounting for hazard exposure, sensitivity, and adaptive capacity.
- 3.18 MCCA and Manchester City Council have continued to collaborate with Exeter University on their [Local Climate Adaptation Tool](#) (LCAT). This online resource combines climate models, health impact evidence and adaptation options, helping local authorities and health service providers to understand the impacts of climate change on public health, which groups are most vulnerable,

and which adaptations are most appropriate to a local area. There is now a prototype map available online which shows how different factors are related and likely to change over time.

- 3.19 The [Manchester Climate Ready](#) website, launched in 2022 by MCCA and Manchester Metropolitan University to collate and showcase local initiatives that support the city's adaptation to a changing climate, has been updated to include additional best practice examples such as the Grow Green programme - an EU-funded project that used nature based solutions to increase climate resilience and create multi-functional green spaces in neighbourhoods.
- 3.20 MCCA has begun work with Greater Manchester Combined Authority, Manchester NHS Foundation Trust and GM Integrated Care to support Manchester City Council in carrying out a detailed risk and vulnerability assessment for the city and developing a comprehensive adaptation plan. Activity to date has focused on identifying existing best practice (from the UK and internationally) in terms of risk assessment methods, guidance, tools, and adaptation plans that can fast-track our collective progress and deliver additional value through an approach that recognises the interplay between a city, a key sector and a city region.
- 3.21 In early 2023, a consortium of partners including Manchester City Council, MCCA, Manchester Metropolitan University, Equans, and Bankers Without Boundaries was one of 30 projects to successfully secure funding from the Innovate UK Net Zero Pathfinder. The project is a three-month feasibility study focused on understanding the non-technical barriers to unlocking investment at scale, via a place-based approach to net zero. The project is working alongside Greater Manchester Combined Authority and Oldham Council who also secured funds to maximise learning and benefit from the activity. The window for phase two bids opens in July 2023 and Innovate UK are indicating that only five projects will be funded at this stage.
- 3.22 In November 2022, MCCA and MCCP secured an A List rating for Manchester from CDP. This positions the city as one of only 122 global cities that meet the highest standard of leadership and transparency on environmental action and data disclosure. Only 12% of cities that were scored received this rating.
- 3.23 The National Lottery funded In Our Nature programme launched its [community support](#) offer in April 2023. This will support projects that take a community-led approach to reducing carbon emissions while also delivering social and financial benefits to community members. Indirect financial support up to £5,000 can be provided to projects and applications are open until 5th June.
- 3.24 In March 2023, the [Greater Manchester Trailblazer Devolution Deal](#) was published. This includes piloting the devolution of net zero funding, including for building retrofit, through allocation rather than competition from 2025 onwards. It also recognises GMCA's roles and activity across strategic energy system planning, local plans, clean heat, housing retrofit and energy efficiency standards, nature recovery and adapting to climate change, and leveraging

private investment into the net zero transition. The deal is subject to ratification by all partners, after which action plans will be developed to mobilise delivery.

4.0 Recommended Actions in the Framework

4.1 The 2022 Update presented over 175 recommended actions that were co-designed with a wide range of stakeholders and organised into four categories according to where the agency to act sits; that is, where there is direct control to deliver, affect or influence the required change or outcome. These four categories are as follows:

- To be delivered locally, where direct control lies in Manchester.
- To work on at city-region level, with Greater Manchester partners.
- To advocate for national government to do.
- To do differently, where there are opportunities to innovate.

4.2 The Next Steps section of the 2022 Update included an action for MCCA and MCCP to work together to assess the relative impact of the recommendations in the Update, with specific focus on those over which Manchester has direct control, as it was identified that additional insights into the level of impact, cost, ease of implementation and timeframe needed would help to catalyse action and prioritise limited resources.

The MCCP Board has done an initial assessment of the 37 recommended actions for local delivery relating to buildings, transport, and renewable energy to identify which have most potential to produce significant emissions reductions and which are most challenging to deliver (due to cost, complex market failure, or other barriers). This assessment is being fed into the activities below, specifically the prioritisation of gaps in activity, and will be revisited and expanded over time with wider stakeholders.

4.3 MCCA has developed a process to review the 73 recommended actions for local delivery to identify where activity is happening; to assess whether this activity will deliver all or just some of the recommendation's ambition; to categorise the status of each activity; and to capture if/what type of data may be available to report progress in future (i.e. quantified data vs qualitative narrative). It will also support the identification and prioritisation of gaps and the development of new initiatives in future. The review has so far identified that:

- 30 recommendations have activity underway. Section 3 of this report contains some examples of this activity.
- 30 recommendations most likely have activity underway; however, we do not have data because a) more work needs to be done to identify and collate it e.g., carbon literacy take up in the health sector; or b) that activity is dispersed across multiple owners and is not coordinated e.g., some private landlords will be retrofitting their properties, some logistics companies will be driving up fuel efficiency, and some manufacturers will be making their packaging more sustainable.

- 10 recommendations have activity planned for future delivery. This includes Manchester Climate Change Partnership ‘peer to peer’ activity on renewable energy, sustainable business travel and staff commuting.
- 3 recommendations have no activity underway currently. This includes developing city scale indicators for health inequality and climate change.

4.4 MCCA has carried out an additional review of all 175+ recommended actions to support Manchester City Council. The review has categorised them according to where action relates to the Council as an organisation needing to take climate action itself; where it is an enabler of climate action in others; where it can leverage its influence to encourage others to take climate action; and where it can lobby government to act nationally to unlock greater local action. This initial assessment is under review and will support evolution of the Council’s Climate Change Action Plan; the findings are that:

- 11 recommended actions relate to where MCC needs to reduce its organisational emissions or increase its organisational resilience.
- 30 recommended actions relate to where MCC is an enabler of others via its duties and powers, for example in setting the Local Plan and a range of other local policies and strategies.
- 64 recommended actions relate to where MCC can play an influencing role to encourage local organisations and companies, other social housing providers, financial institutions, and regional bodies such as TfGM and GMCA to accelerate and amplify their climate action to support local impact.
- 53 relate to recommended actions where MCC can play a lobbying role with national government.

4.5 MCCA has carried out a further review of recommended actions to identify where MCCP or MCCA is named as the lead owner. There are 14 of these, all categorised as for local delivery, and the assessment described in section 4.3 shows that eight have activity underway, four have activity planned for the future, and two are yet to have action developed.

4.6 Work to complete the identification and categorisation of activities that deliver the Framework’s recommended actions will continue via consultation with MCCP members and wider local and city-region stakeholders over the coming months. This will deliver a more comprehensive picture of positive climate activity underway and help to surface where data will/will not be available to support ongoing reporting (see section 5 for more detail). It will also support the identification and prioritisation of gaps in delivery to enable new initiatives to be developed.

5.0 Tracking and Reporting Progress

5.1 The *Next Steps* section of the 2022 Update included an action for MCCA and MCCP to work together to explore options for tracking progress against the targets and recommendations made. It acknowledged that data will not be available for all measures, and that when it is available it is often time-lagged, incomplete and incompatible with other data.

- 5.2 To support this, and in addition to the activity described above in section 4, MCCA has carried out a review of tools available in the market for measuring carbon reductions and tracking city-wide progress to help determine the most suitable approach for Manchester.
- 5.3 The review found that the tools essentially perform the same function, taking national data and adapting it to the local level. This includes total CO2 emissions, as already reported in Manchester by MCCA within the city's Annual Reports, alongside other metrics managed at national level that can be 'cut' to show local performance, such as local renewable energy installed or EPC ratings on domestic properties. This is often described as 'top-down' data.
- 5.4 While top-down data is useful in that it can show overall trends and change, it does not always marry up to the specific targets set locally, or to initiatives that are being delivered locally, hence does not always demonstrate the effectiveness of local policy or action in any causal way. It can also be significantly time-lagged and so is not always an effective tool to inform action in real time.
- 5.5 MCCA will use the next round of UK government data on direct emissions, expected in summer 2023, to explore how far it can provide additional insights within the city's Annual Reports on how different sectors are performing.
- 5.6 Bottom-up data, or data produced by local initiatives is more challenging for several reasons. Carbon savings data is particularly challenging because:
- Emissions reductions are complex to calculate even for direct interventions and may rely on integrated technology such as smart meters and have a time lag from installation to reliable data.
 - Many actions cannot be tracked via emissions savings without significant additional research, for example the causal link between a policy intervention and its resultant carbon reduction or the energy savings made by residents following social housing retrofit.
 - Proxies for carbon savings are available for some activities, such as average energy savings per household, but cannot reliably be scaled-up to provide a robust picture for a particular location.
 - Local sources of data may not be subject to the same level of audit and verification as national sets and so may be less accurate.
- 5.7 For local initiatives therefore, there is a need to explore what other bottom-up data, aside from carbon emissions, can be captured to show progress. This may include:
- Financial data, e.g., grant funding deployed to retrofit the public estate.
 - Activity data, e.g., the number of low carbon measures installed in social housing.
 - Engagement data, e.g., the number of residents involved in a particular climate action, initiative, or project.

5.8 Additional data challenges include:

- Activity may be being delivered by a large number of actors (such as industrial decarbonisation) where the activity is not co-ordinated and for which there is no mechanism to capture and collate data.
- Activity may be happening at a larger geography than Manchester and so may be difficult to disaggregate down to an appropriate local level.

5.9 Whilst some of the commercial tools on the market that were reviewed by MCCA are attempting to incorporate bottom-up data, based on local activity, the success of this functionality relies almost exclusively on local data collection and input, rather than on embedded calculations, and so requires significant 'person power' on top of any software cost to ensure success.

5.10 The MCCP Board has asked MCCA to continue its exploration of data available to track progress (both top-down and bottom-up data), including from UK government and local initiatives, plus by working with Greater Manchester Combined Authority's data team, to support Manchester in developing a more granular, comprehensive and frequent means to track progress towards its climate change targets and the recommended actions in the 2022 Update to the Manchester Climate Change Framework.

6.0 Recommendations

6.1 The Committee is recommended to note the progress underway in mapping and delivering actions that support the city's climate change ambitions and the challenges associated with capturing and collating robust and quantifiable data.

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