

**Manchester City Council
Report for Resolution**

Report to: Neighbourhoods and Environment Scrutiny Committee - 18 July 2018

Subject: Manchester Climate Change Annual Progress Report

Report of: Sara Todd, Deputy Chief Executive (Growth and Neighbourhoods)

Summary

This report sets out the progress being made towards the delivery of the city's ambitions to reduce carbon emissions. It includes details of the citywide progress towards the interim target of a 41% reduction in carbon emissions by 2020 from a 2005 baseline. It also details the Council's contribution towards this target via the reduction in direct carbon emissions attributed to the Council's activities since 2009/10. The latest data shows that citywide emissions have reduced by 34% since 2005 and the Council's direct emissions have reduced by 33.8% from a 2009/10 baseline. The report also provides some further information about the city's transition towards being a zero carbon city.

Recommendations

It is recommended that the Committee note the content of this report and the progress which is being made towards the city's zero carbon ambitions.

Wards Affected: All

Alignment to the Our Manchester Strategy Outcomes (if applicable)

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.
A highly skilled city: world class and home grown talent sustaining the city's economic success	
A progressive and equitable city: making a positive contribution by unlocking the potential of our communities	

A liveable and low carbon city: a destination of choice to live, visit, work	The citywide and Council targets for becoming a zero carbon city will support the ambitions to become a liveable and low carbon city.
A connected city: world class infrastructure and connectivity to drive growth	

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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 Strategy 2017-50
Manchester Climate Change Strategy Implementation Plan 2017-22
Manchester: A Certain Future Annual Report 2017

MCC Climate Change Action Plan 2016-20
MCC Climate Change Action Plan Update Report: Quarter 4
MCC Carbon Emissions Report: Quarter 4
MCC Climate Change Action Plan mid-year report January 2018
MCC Climate Change Action Plan annual report July 2017

1.0 Background

1.1 This report provides the Committee with an annual update on the progress towards delivering the city's commitments on climate change. The report includes the citywide activity being coordinated by the Manchester Climate Change Agency (MCCA) and the Council, as well as a detailed breakdown of the reduction in the Council's direct CO₂ emissions. The Committee have previously received separate reports on citywide activity and Council activity but the aim of this report is to combine these into a more coherent narrative. The report concludes by providing an update on the ambitions for the city post 2020.

2.0 Citywide progress

2.1 The Manchester Climate Change Strategy 2017–2050 commits Manchester to be a zero carbon city by 2050 at the latest to support the COP21 Paris Agreement. The Strategy contains a detailed implementation plan and calls for collective action under the following 5 objectives: Sustainable economy and jobs; Healthy Communities; Resilience to Climate Change; Zero Carbon; and Culture Change.

2.2 Analysis of the latest Government figures shows that over the last year the city's carbon emissions have fallen from 2.2 million tonnes in 2016 to 2.1 million tonnes in 2017 – a 2.7% reduction. To date, the city has achieved a 34% reduction since 2005 against the 41% target and is projected to achieve a 38% reduction in carbon emissions by 2020.

2.3 The Manchester Climate Change Agency (MCCA) was established in 2015 to support, encourage and enable organisations and individuals in Manchester to contribute towards delivering on the city's commitments on climate change. The Agency is an enabling organisation whose priorities are focused on adding value to existing climate change activities in the city, for example through promotion of partners' activities, and filling gaps that exist in the delivery of Manchester's Climate Change Strategy, in particular through the development of new projects and funding bids.

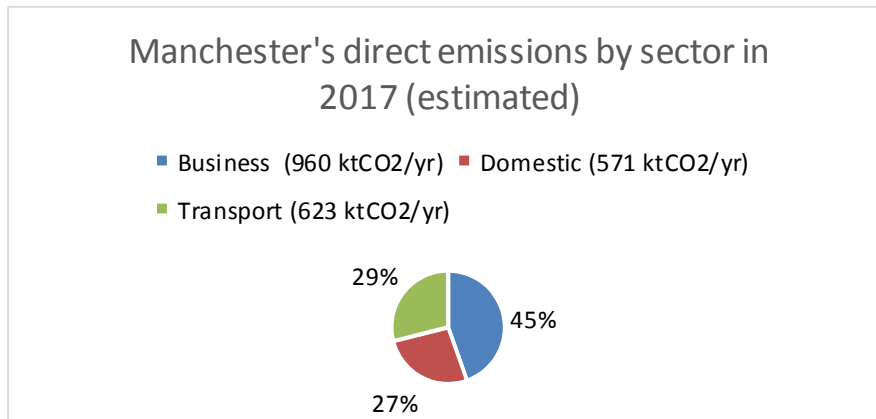
2.4 The Agency works in partnership with local, national and international organisations on initiatives that support and celebrate action on climate change. The Agency was established by the Manchester: A Certain Future Steering Group, Manchester City Council and Manchester-based architectural and engineering company BDP. It is a not-for-profit Community Interest Company.

2.5 The Council also has a broader role beyond its involvement in the Manchester Climate Change Agency and seeks to influence partners and ensure that there is collective ownership of the climate change agenda. Figure 1 (below) shows the current breakdown in direct emissions types across the city. The Council has opportunities for influence in these areas is as follows:

- Industry and Commercial: Supporting schools and businesses to reduce their emissions wherever possible, developing planning policy, influencing contractors through procurement and commissioning.

- Domestic: Partnership working with social housing providers across the city to improve social housing properties, working with the Greater Manchester Combined Authority (GMCA) to develop energy efficient programmes to support private renters and owner occupiers.
- Transport: Partnership working with TfGM, continuing to promote modal shifts by investing in sustainable transport infrastructure, ensuring new developments are close to transport nodes.

Figure 1: Manchester's citywide direct emissions by sector 2017



3.0 Engagement with schools, partners and businesses

3.1 The Committee requested that this report provided an update on the work which had been delivered within schools and the wider education system in Manchester. The following section provides an update on work with schools and other key partners in the city such as cultural institutions and universities.

3.2 A total of 96% of Manchester schools are now registered as Eco schools with an increase in 4 registrations over the past financial year. However, the number of top level Green Flag schools and Silver Flag schools declined, possibly due to the budgetary squeeze on the cost and time resource required to maintain higher status Green Flag and Silver Flag status.

- 54 schools are at Bronze level, 48 are at Silver level and 8 are Green Flag schools,
- Over the past year the number of Bronze award schools has increased by 5, whilst the number of Silver award and Green Flag schools have both declined by 2.

Table 1: Eco schools in Manchester*

Indicator *	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/8
No. registered Eco Schools	136	137	142	137	147	153	161	187	191
% total no schools registered	82%	82.5%	85%	82%	88%	87%	92%	94%	96%
Green Flag schools	5	9	14	15	15	13	13	10	8

*Statistics for reporting Eco Schools programme in Manchester include private nurseries, state funded schools, pupil referral units, academies and sure start centres that have previously had support from Manchester City Council but not independent schools.

- 3.3 The Manchester Environmental Education Network (MEEN) provides termly Green Teach Meet sessions for schools, practitioners and other interested parties from across Greater Manchester to come together to share practice and explore ideas. MEEN also provides a termly newsletter full of local, regional and national news and opportunities and delivers conferences and projects around specific issues, this year having a particular emphasis on the importance of soil. www.meen.org.uk
- 3.4 Manchester Arts and Sustainability Team (MAST) is a network of around 30 organisations that meets regularly to share best practice and develop new joint initiatives. MAST's latest report predicts a 34% reduction in emissions by 2020 and a large increase in activities that engage the citizens of the city with climate change.
- 3.5 Other Low Carbon Culture Change highlights include:
- Cultural organisations Manchester Museum and HOME have now certified 100% of staff trained as Carbon Literate. Manchester based Museum Development NW has trained Carbon Literacy trainers for the sector across the North of England.
 - In 2018 Manchester Metropolitan University earned the accolade 'UK's Greenest University' for the second time after it was ranked first in the People and Planet University League and was Highly Commended in the UK's Green Gown awards. The awards highlighted MetMunch; a global award-winning, student-led social enterprise based at MMU and its cascade of Carbon Literacy to students and external organisations.
 - The University of Manchester's 10,000 Actions Programme aims to provide all 10,000+ members of University staff with the opportunity to engage in a programme of learning and positive action on sustainability. To date, 40% of staff have committed to over 25,000 actions on the programme. The University also won a Green Gown award in 2017.
- 3.6 The Manchester Climate Change Agency also work closely with businesses in the city to develop joint projects in the city which can drive forward the climate

change agenda. This includes a long standing partnership with BDP who currently host and chair the Agency. The Agency and the Council also help to promote support to businesses to help them become more environmentally sustainable. This includes the Resource Efficiency scheme for Small and Medium Enterprises which is run by the Greater Manchester Growth Hub. This provides free advice and support to help businesses reduce their energy consumption and improve their productivity.

4.0 Citywide Carbon Literacy

4.1 The Carbon Literacy Project launched in 2012 and is a mass low-carbon-culture-change project. To date approximately 8,000 citizens are Carbon Literate and of these approximately 5,000 live work or study (“belong”) to Manchester. The project was founded in Manchester however its scale and approach remains unique worldwide.

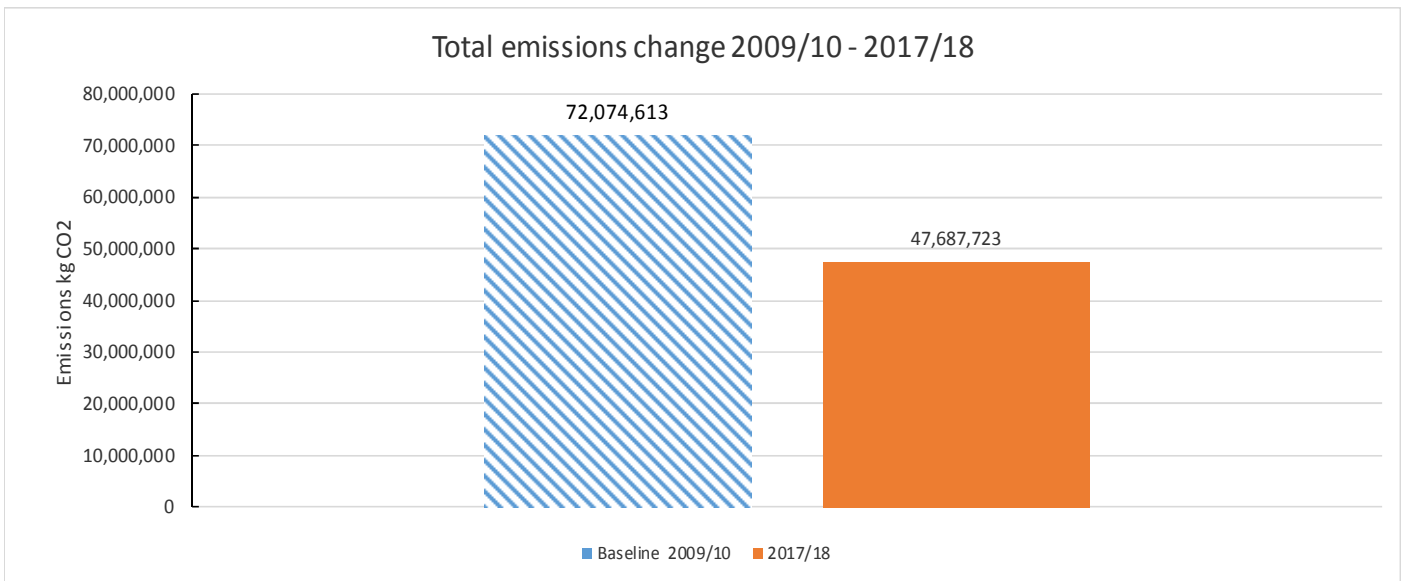
4.2 Key initiatives of the project include:

- The continued growth and expansion of Carbon Literacy for Registered Providers of social Housing (CL4RPs) a consortium of over 20 housing providers committed to Carbon Literacy. Over 2300 social housing staff are now certified, most in Manchester, and many housing providers are now Carbon Literate Organisations, (CLOs) including Northwards Housing at the highest Platinum level.
- The launch of the Salford city-wide Carbon Literacy consortium and the first Carbon Literate NHS organisation (Salford CCG)
- Pioneered by Manchester City Council, in total five GM local councils are now either already delivering or developing Carbon Literacy delivery for their staff.
- The expansion of Carbon Literacy into communities and cities across Scotland, Wales, Amsterdam, and locations across Europe.
- There are now 22 Carbon Literate Organisations of which 10 are in Manchester. The Carbon Literate Organisation (CLO) accreditation is the visible ‘badge’ that showcases an organisation as (i) committed to Carbon Literacy, (ii) having a substantial number of people who are Carbon Literate, and (iii) having a commitment to support its Carbon Literate people and maintain its low carbon culture. www.carbonliteracy.com

5.0 Manchester City Council Climate Change Action Plan 2016-2020

5.1 The Council aims to reduce its direct carbon emissions by 41% by 2020 from a 2009/10 baseline. The latest emissions data for 2017/18 shows that the Council’s direct emissions have reduced by 12% from 2016/17 and by 33.8% since 2009/10. Figure 2 (below) shows the change in total CO₂ emissions between 2009/10 and 2017/18. The scope of the CCAP includes only carbon emissions that the Council is directly responsible for, such as our operational buildings estate, street lighting and some transport activities including business travel and the waste fleet. A separate presentation has been provided in Appendix 1 which sets out the methodology used to generate the annual statistics and also provides some useful case studies.

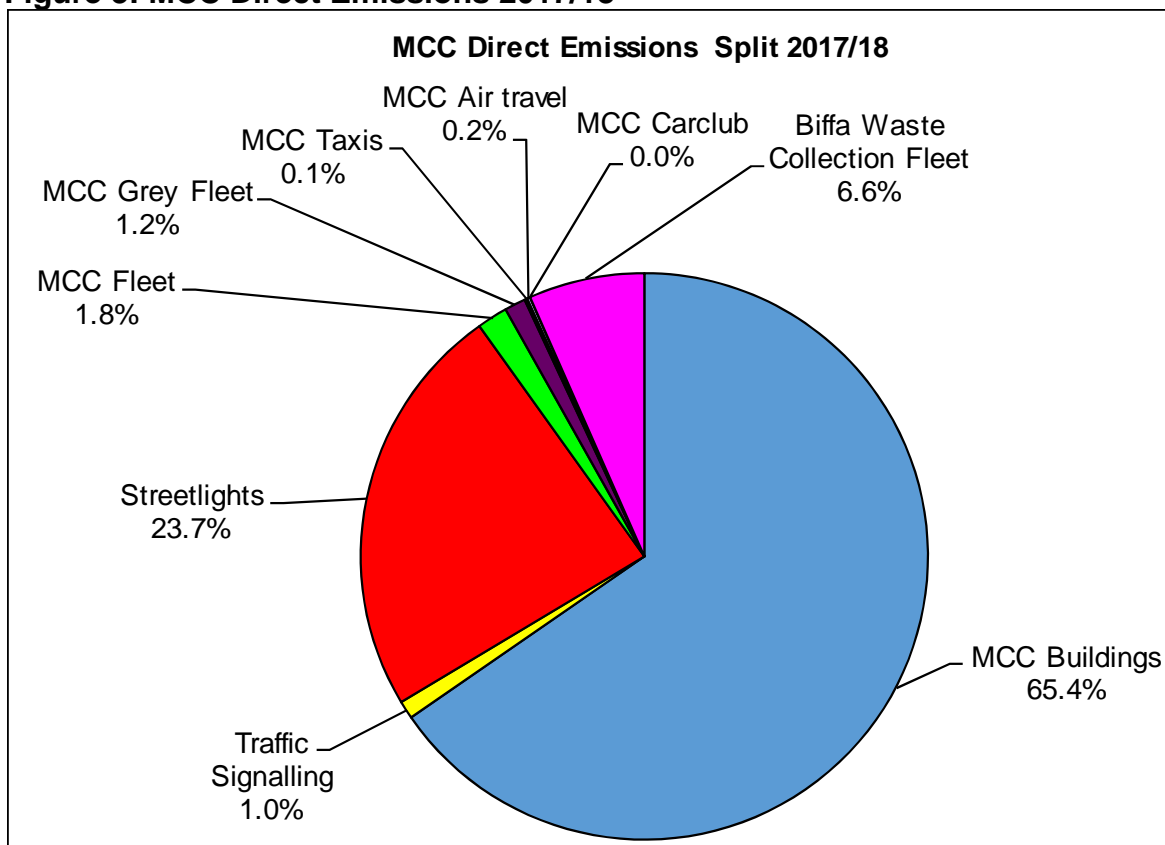
Figure 2: Total emissions change between 2009/10 and 2017/18



5.2 In 2009/10, the majority of the Council’s direct emissions came from our built estate (66%), followed by street lighting (22%). A smaller proportion was attributed to transport (9%) and traffic signalling (3%).

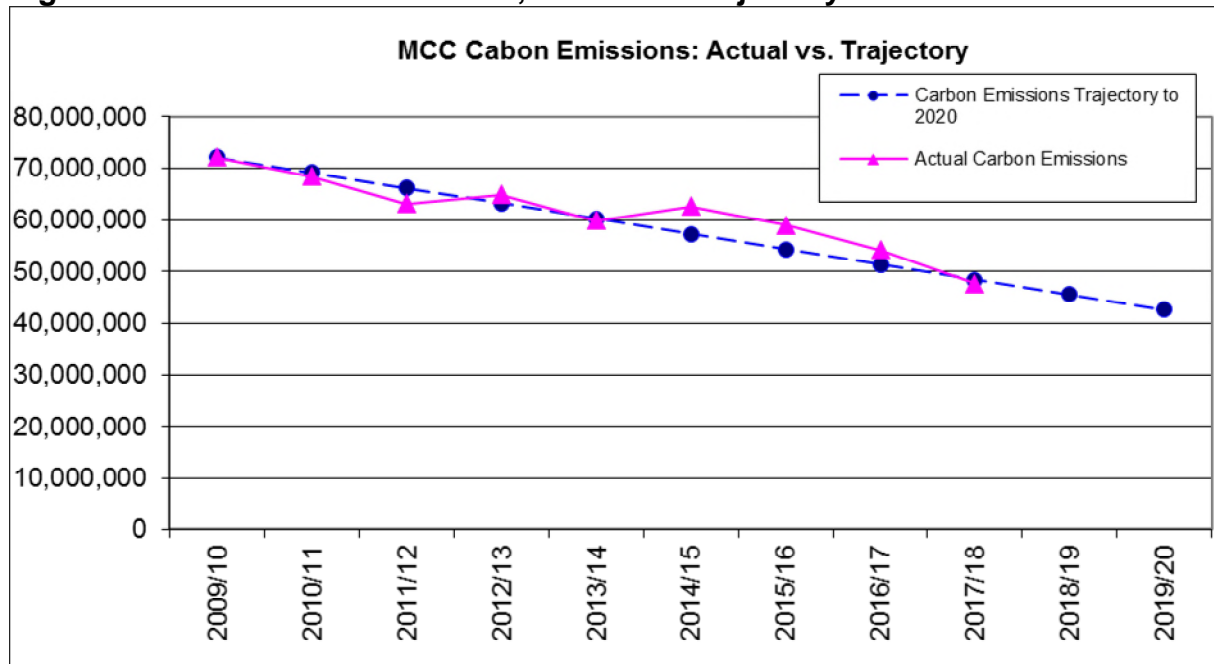
5.3 In 2017/18, the split has shifted slightly with a small increase in street lighting and waste fleet but a reduction in fleet and traffic signalling. The buildings share of emissions has remained approximately the same (see figure 3 below).

Figure 3: MCC Direct Emissions 2017/18



5.4 Figure 4 (below) plots the Council’s actual CO₂ emissions against the trajectory required to meet the 41% target in 2020 and demonstrates that reductions are currently on target.

Figure 4: MCC Carbon Emissions; Actual vs Trajectory 2009/10 - 2019/20

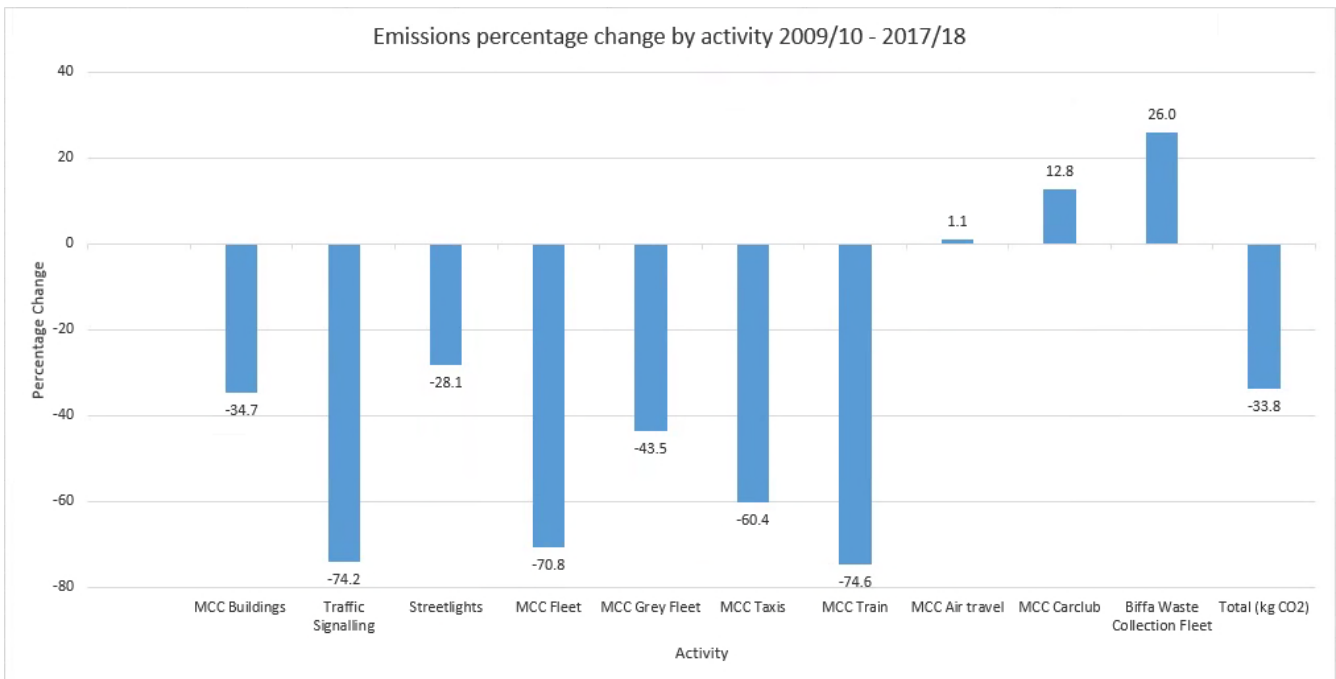


5.5 Table 2 (below) shows the detailed emissions breakdown in kg² of CO₂ across the different functions of the Council which are in scope. Most activities have seen a significant reduction since 2009/10, with only air travel, carclub and waste collection having increased. The increase in carclub activity is a positive one as more services are now using this as an alternative to driving or using taxis. Air travel fluctuates from year to year with the 2017/18 figure half of the total for 2015/16. This includes all of the Council’s outbound international visits including projects funded by Europe but makes up just 0.2% of all of the Council’s direct emissions. Figure 5 (below) shows the percentage change between 2009/10 and 2017/18 in a simpler bar graph format.

Table 2: Detailed breakdown of emissions by Council activity

Activity	Emissions KG CO ₂										% change from baseline
	Baseline 2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18		
MCC Buildings	47,764,131	43,892,166	41,407,195	43,063,463	39,649,699	41,192,707	38,746,420	35,374,712	31,173,935	-	34.73
Traffic Signalling	1,894,023	1,661,973	1,474,507	1,310,166	890,934	733,420	644,842	585,275	489,509	-	74.16
Streetlights	15,725,949	15,601,708	14,716,620	15,052,168	14,898,208	16,291,891	15,111,934	13,386,215	11,309,985	-	28.08
MCC Fleet	2,863,487	2,986,009	2,589,826	2,415,510	1,682,948	1,701,589	1,142,646	1,013,703	836,047	-	70.80
MCC Grey Fleet	1,001,324	918,211	624,799	774,219	565,709	587,975	532,287	577,454	565,751	-	43.50
MCC Taxis	135,731	138,575	113,512	76,459	48,558	51,075	37,758	54,736	53,817	-	60.35
MCC Train	109,729	57,605	39,920	43,797	27,120	47,454	46,685	30,284	27,832	-	74.64
MCC Air travel	78,502	52,131	60,603	89,605	141,490	89,921	166,165	83,592	79,369	-	1.10
MCC Carclub	5,437	8,803	9,191	8,983	9,517	8,302	7,529	6,469	6,130	-	12.75
Biffa Waste Collection Fleet	2,496,300	2,986,009	2,087,485	2,054,124	1,963,586	1,978,892	2,579,476	3,051,320	3,145,349	-	26.00
Total (kg CO₂)	72,074,613	68,303,189	63,123,658	64,888,494	59,877,769	62,683,225	59,015,742	54,163,760	47,687,723	-	33.84
Annual shift (%)		5.2	7.6	-2.8	7.7	-4.7	5.9	8.2			12.0
Change from Baseline (%)		5.2	12.4	10.0	16.9	13.0	18.1	24.9			33.8

Figure 5: Emissions change by activity 2009/10 – 2017/18



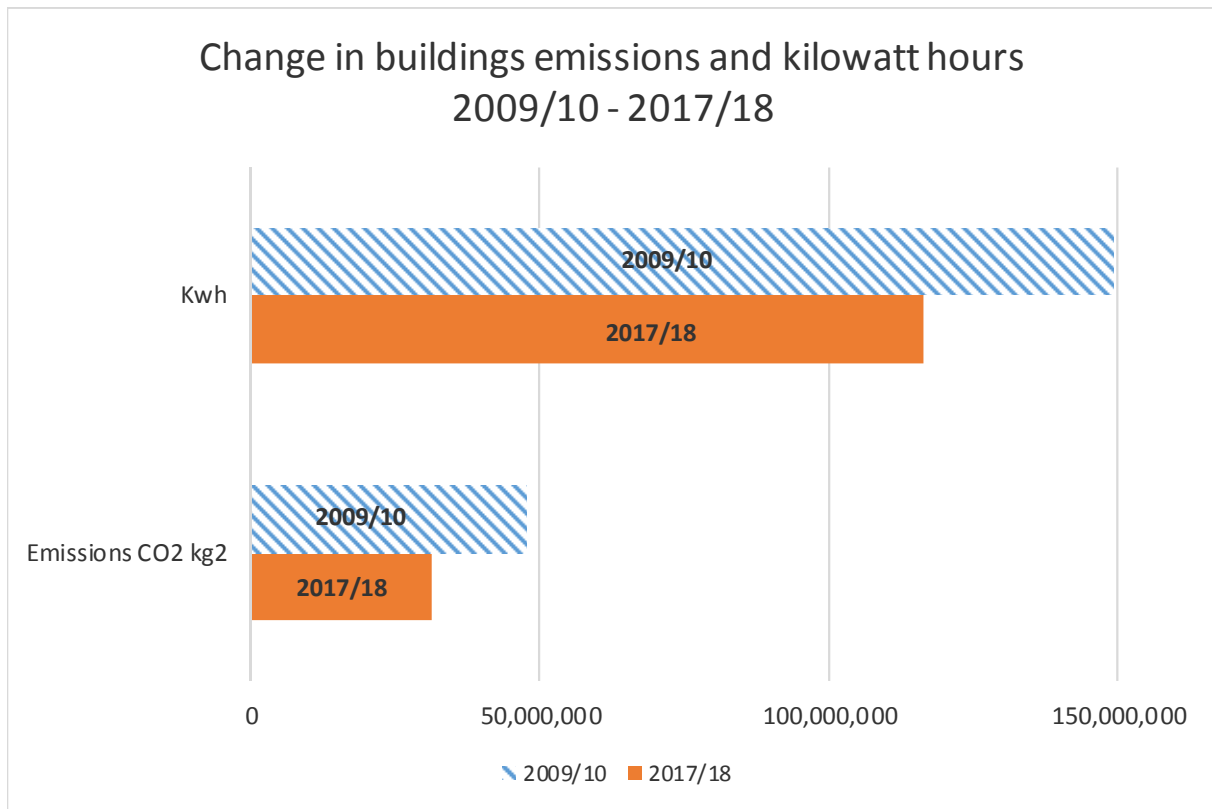
Buildings

5.6 As shown by figure 3 above, buildings account for two thirds of all the Council's direct emissions and are therefore a major priority within the CCAP. The CCAP 2016-2020 targeted a reduction of 5,900 tonnes of CO₂ across the Council's operational estate (excluding schools) which is 8.1% of the 2009/10 baseline. A number of actions were identified including:

- The implementation of an Estates Transformation Programme;
- Embed carbon savings within the Estate Asset Management Programme;
- Rationalisation of identified buildings;
- Implementing 'quick win' actions identified in energy audits carried at five buildings;
- Investigation of the use of a variety of funding opportunities.

5.7 Significant progress has already been made in reducing consumption across the Council's operational estate as shown in figure 6 (below).

Figure 6: Change in buildings emissions and kilowatt hours 2009/10 – 2017/18



5.8 Table 3 (below) shows the change in total CO₂ emissions and kilowatt hours across the Council's estate since 2009/10. The kilowatt hours figure is made up of electricity, oil and gas which each have their own emissions factor. Gas and Oil emissions factors have remained static, but the electricity emissions factor has reduced over the last 3 years as the national grid is decarbonised. It should also be noted that although the Council procures 'Green Electricity', the standard emissions factor for calculating CO₂ emissions must still be used as the savings have already been captured within the national grid. This underplays the Council's true reduction in CO₂ emissions.

Table 3: Buildings consumption and emissions 2009/10 – 2017/18

	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Emissions									
CO2 kg ²	47,764,131	43,892,166	41,407,195	43,063,463	39,649,699	41,192,707	38,746,420	35,374,712	31,173,935
Kwh	149,325,127	138,643,513	136,682,388	140,535,003	127,874,566	121,954,418	122,928,034	119,456,372	116,380,703
% reduction in emissions from baseline		- 8.1	- 13.3	- 9.8	- 17.0	- 13.8	- 18.9	- 25.9	- 34.7
% reduction in kwh from baseline		- 7.2	- 8.5	- 5.9	- 14.4	- 18.3	- 17.7	- 20.0	- 22.1
% change in emissions between 2016/17 and 2017/18									- 11.88
% change in kwh between 2016/17 and 2017/18									- 2.57

- 5.9 The Council's Estates Board have overseen the development of a Carbon Reduction Programme (CRP) which identifies savings of over 4.7 million kg of CO₂. The programme has been developed on an invest to save basis with the revenue savings associated with reduced utility consumption being used to repay the capital required for the new technologies, which in turn drive down the Council's carbon emissions.
- 5.10 Of the top 20 highest carbon emitting buildings 15 have been identified as candidates for the first phase of investment in the estate. Included in this is a broad range of buildings in terms of function, age and condition. The first phase of delivery includes office buildings, community leisure facilities, elite leisure facilities, museums, galleries and markets. Some buildings were built in the last few years, whereas others have been largely untouched (other than basic maintenance) in over 20 years.
- 5.11 Following the appointment of a Programme Manager in 2017/18, work to date has focussed on securing the services of an Energy Services Company to design and deliver the required energy efficiency and on site generation works. As this is the first time the organisation has delivered a retrofit programme of this size and scale it was decided that the best delivery approach would be to utilise Energy Performance Contracts (EPCs). EPC's involve a longer relationship between the supplier and the Council compared to a traditional design and build approach. As such, the energy savings proposed in the design phase are guaranteed for the length of the capital payback period. Following advice from the GMCA a framework called Re:fit was identified as the best route to market for EPC's.
- 5.12 Re:fit is a framework set up by the Local Government Association and the Treasury and procured via Crown Commercial Services to support public sector and local authorities when procuring and implementing sustainable energy technologies. The framework is endorsed and supported by the Department for Business, Energy and Industrial Strategy and the Cabinet Office. It is described as a tried and tested approach with more than 200 public sector organisations

having used Re:fit to procure more than £133 million of capital works to more than 715 buildings.

5.13 The programme is currently in the middle of the procurement process which is due to complete in Q2 2018/19. Upon conclusion of this process, a detailed programme of delivery will be agreed with the supplier with works expected to complete in Q3 2019/20.

5.14 The Estates Asset Management programme is a rolling capital programme of repairs and maintenance to the operational estates based on risk and priority. It continues to include consideration of the most appropriate sustainable technologies as part of the consideration of each project or design.

Civic Quarter Heat Networks

5.15 A heat network is due to be installed for the Civic Quarter which will connect to a number of buildings including; the Town Hall, the Town Hall Extension, Central Library, Heron House, Manchester Central, the Bridgewater Hall and Manchester Art Gallery. The ability for the Town Hall to be connected to the Civic Quarter Heat Network and the provision for greater optimisation and controls provides significant reductions. Once installed, the heat network will reduce the Council's total emissions by 32,238 tonnes which is 3.1% of the total 2009/10 baseline

5.16 During the last 12 months, the external project support was appointed following a competitive tender process. The project delivery team is now focussing on work across six key work-streams towards financial close:

- Technical / Detailed Design;
- Legal;
- Financial;
- Commercial;
- Special Purpose Vehicle; and
- Planning, consents, licenses.

5.17 The Civic Quarter Heat Network project is currently approaching financial close and construction of the project will begin once this milestone has been reached.

Street lighting

5.18 Street lighting currently contributes a quarter of all the Council's direct CO₂ emissions. All Manchester street lights are currently being replaced with LEDs which will save 8,400 tonnes of CO₂ which is 11.7% of the total 2009/10 baseline. To date 13,725 units have now installed and these have been certified as 100% compliant by an independent verifier. It is anticipated that the installation of LEDs will be complete by September 2019. Between 2016/17 and 2017/18 emissions from street lighting reduce by 15.5%. Since 2009/10 emissions have fallen by 28.1%.

Transport

- 5.19 Emissions from transport related activities have generally fallen since 2009/10 which is partially the result of the reduction in the number of staff working for the Council. Emissions from fleet, grey fleet, taxi's and trains have all seen significant reductions from the baseline, however, emissions from air travel have slightly increased and the car club emissions have significantly increased albeit from a low level. A shift to electric or hybrid vehicles in the future will result in further reductions to fleet and grey fleet emissions.
- 5.20 Between 2016/17 and 2017/18 emissions from the Biffa Waste Fleet have increased by 3.1% Some of this increase has come from the increase in street cleansing services which have resulted in additional sweeper vehicles being used within the contract. Further increases have come from the increase in street cleansing services during the autumn leaf collection as this service was previously undertaken by an external provider but has now been brought in house. Discussions are currently underway with Biffa about a pilot project for electric waste collection vehicles but there have been some delays in getting the first vehicles ready for operation.

Carbon Literacy Training

- 5.21 The refreshed version of Carbon Literacy Training has now been developed with Manchester Metropolitan University, who were appointed via a formal quotation process. The training is now called 'Our Climate, Our City' and is a full day workshop event after which attendees are accredited as carbon literate.
- 5.22 The workshop has been designed with a number of learning styles in mind and includes a screening of the Leonardo DiCaprio documentary 'Before the Flood', a panel discussion and group working to identify the actions staff and elected members can take to support the city's low carbon ambitions. The training is underpinned by the Our Manchester approach and focuses on ensuring that attendees can 'own it and aren't afraid to try new things'. Being 'proud and passionate about Manchester' are also central themes within the training.
- 5.23 Since the relaunch in March 2018, 66 people have attended the full day of training and approximately 50 people are booked in for training dates in July. Further sessions are being scheduled for September and are being promoted via internal communications such as 'Team Talk' and at Growth and Neighbourhoods Staff Conference in July. Elected members are also invited to all sessions and those who have completed the previous Carbon Literacy Training are welcome to attend again.

6.0 Manchester post 2020 - Planning for a zero carbon city

- 6.1 The Our Manchester Strategy 2016-25 was launched in March 2016 and contains the commitment that Manchester will play its full part in limiting its impact on climate change including a commitment that by 2025 the city will be on a path to be zero carbon by 2050. In July 2016, the Council outlined its

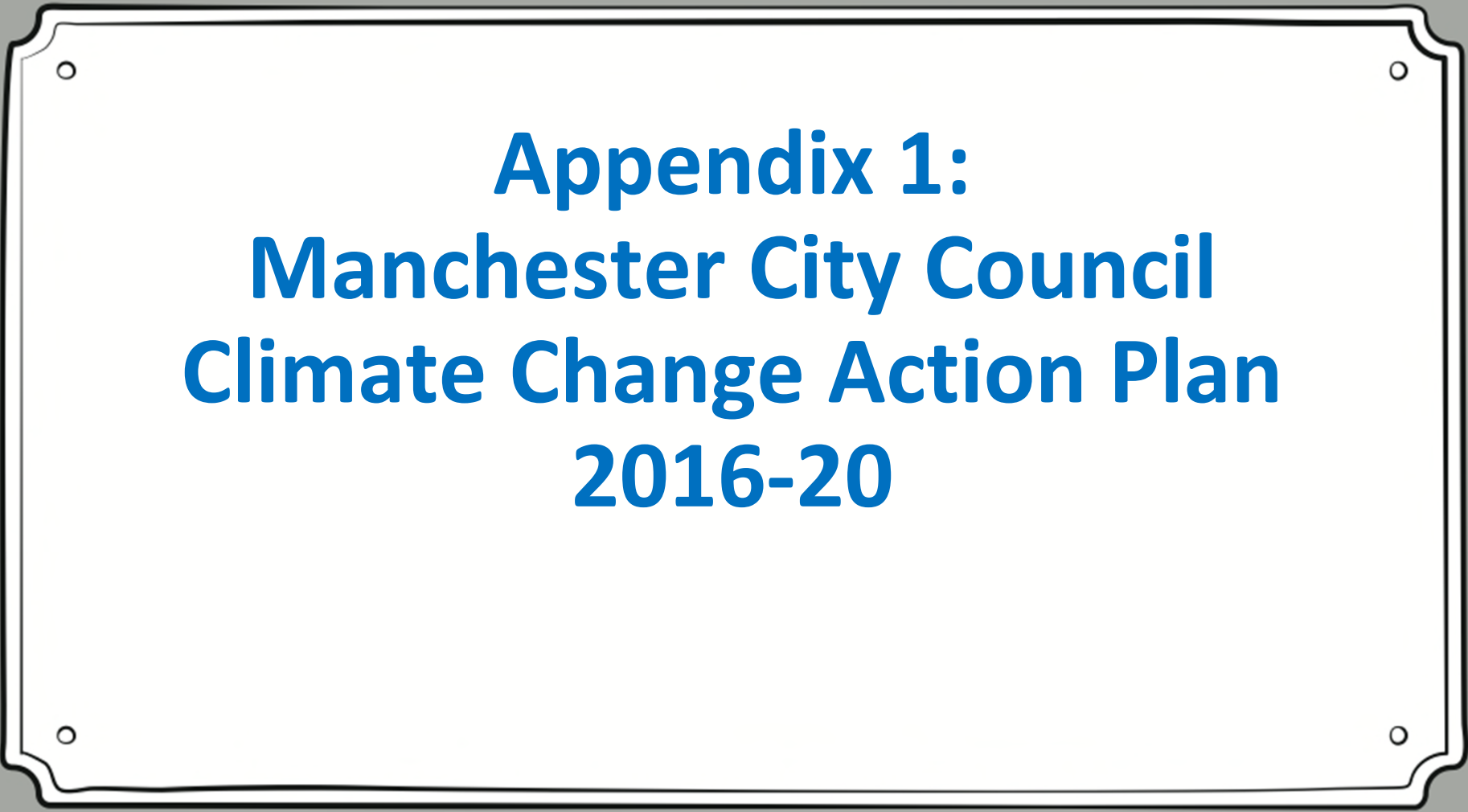
commitment to be zero carbon by 2050 in the Climate Change Action Plan (CCAP) 2016-20.

- 6.2 The Greater Manchester Mayor's Green City Region Summit was held on 21st March 2018 and was attended by over 400 people. As part of the broad pledge to ensure Greater Manchester achieves 'carbon neutral' status by 2040 at the latest, the GMCA, The Tyndall Centre and consultancy Anthesis Group unveiled a new UK city-focused low carbon pathway model, dubbed SCATTER or Setting City Area Targets and Trajectories for Emissions Reduction.
- 6.3 As part of the SCATTER project¹, the Tyndall Centre for Climate Change Research assessed Greater Manchester's fair share of global emissions in line with the Paris Agreement. They calculated a total carbon budget of 71 million tonnes CO₂ between 2018 and 2100. The majority of the budget - 67 million tonnes - is allocated to a series of 5 year carbon budgets for the period 2018 to 2038, with the remaining 4 million tonnes allocated to the period 2038 to 2100. This means that Greater Manchester's annual carbon emissions will need to fall to near zero (below 0.6 Mt CO₂) by 2038 in order to stay within the total carbon budget.
- 6.4 Using the same methodology, a carbon budget for Manchester has been calculated as 15 million tonnes CO₂. This will require us to reduce our carbon emissions by an average of 13% per annum to stay within the budget. Following this commitment, the MCCA and the Council are exploring the implications and requirements of developing a science based target of carbon reduction to zero carbon by 2038. An update on these discussions will be provided to the Committee during autumn 2018.

7.0 Conclusion and recommendations

- 7.1 This report has set out the progress that is being made in achieving the citywide ambition of reducing emissions by 41% by 2020 and the Council's direct contribution towards this target. Significant progress has been made, especially in relation to the Council's operational estate, but there is still work to be done to successfully meet the 2020 target and to plan for the transition to being a zero carbon city and Council.
- 7.2 It is recommended that the Committee note the content of this report.

¹ SCATTER (Setting City Areas Targets and Trajectories for Emission Reductions) is underpinned by the Greenhouse Gas Protocol for Community Scale Greenhouse Gas Emissions (GPC). For more information, see <https://info.anthesisgroup.com/scatter-green-cities>



Appendix 1: Manchester City Council Climate Change Action Plan 2016-20

Introduction

- Scope of the plan
- Methodology
- Estate Rationalisation and Building Usage
- The path to zero carbon

Scope

The plan is focused on the Council's direct carbon emissions and includes:

- Operational buildings
- Traffic Signalling
- Street Lighting
- MCC Fleet
- Staff Travel including - Grey Fleet (business travel using staff vehicles), Taxis, Train, Air, City Car Club
- Biffa Waste Collection

The plan does not include city wide emissions such as housing, schools, industry etc. These are included in Manchester Climate Change Agency activities

Scope cont.

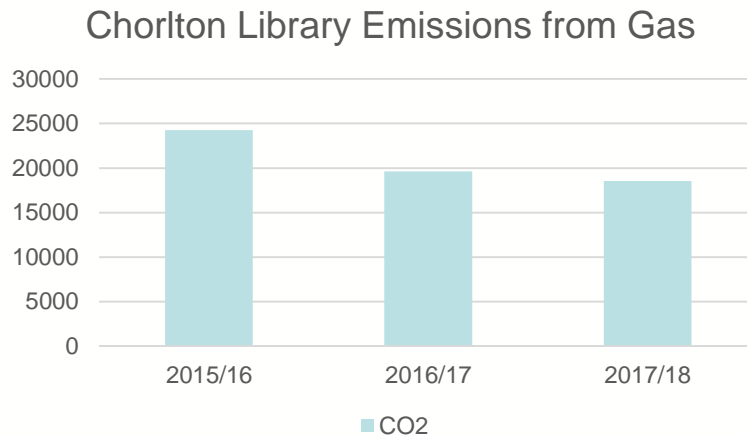
- The operational buildings estate includes over 300 buildings
- It includes leisure sites but not schools or non-operational investment portfolio
- Buildings can only be included if MCC manage and have access to their energy data
- Consumption data for these sites are supplied by MCC's Energy Management Unit (EMU)
- The top 25 buildings account for approximately 80% of carbon emissions
- Includes some buildings we don't have direct control over e.g. Sharp, Manchester Central

Methodology for calculating emissions

- Baseline emissions established in 2009/10
- Methodology has remained consistent since baseline was established
- Use emission factors provided by government which transfer raw data (kwh, miles etc.) to CO₂. These are updated annually
- Emissions factors take in to account electrification of the grid and changes in mix of fuels used to generate electricity
- The Council procures 'Green Electricity', however we still have to use the standard emissions factor for calculating CO₂ emissions as such see no reduction in our direct emissions.

Chorlton Library

- Boiler replacement in 2015
- Reduction in gas emissions of 23.5%



Estate Rationalisation and Building Usage

- Some large buildings have been rationalised since 2009/10 e.g. Wenlock Way
- Conversely some buildings have been built and seen changes in their usage e.g. Town Hall Extension and Library have increased staff and visitor numbers and are open for longer
- When the baseline was established in 2009/10 the Town Hall Extension and Library were not in use.
- They were reintroduced in to reporting figures in once they re-opened
- From 2017 the Town Hall energy usage will fall whilst it is being renovated.

Current and Future Building Usage

- Increasingly flexible and adaptable to service provisions needs
- Co-location with health service, police, DWP etc.
- As such, some buildings are being used more efficiently but their CO₂ emissions are increasing

Zero Carbon

- The 2016-20 CCAP makes the commitment that the Council will zero carbon by 2050
- 5 year plans
- Dramatic shift away from traditional energy supplies required
- Flexibility essential to adapt to changes in government policy, opportunities and challenges

Activity	Timescales
Research	Ongoing
Established an MCC internal working group to develop the plan	Spring 2019
Establish a Members working group	Summer 2019
First draft of 5 year plan published	Summer 2019 – Spring 2020
First 5 year plan including actions and carbon reduction targets established	March 2020