

Neighbourhoods and Environment Scrutiny Committee

Date: Wednesday, 7 November 2018

Time: 10.00 am

Venue: Council Ante Chamber, Level 2, Town Hall Extension

Everyone is welcome to attend this committee meeting.

There will be a private meeting for members of the Committee at 9:30 am in Committee Room 6, Room 2006, Level 2 of the Town Hall Extension.

Access to the Ante Chamber

Public access to the Ante Chamber 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. That lobby can also be reached from the St. Peter's Square entrance and from Library Walk. There is no public access from the Lloyd Street entrances of the Extension.

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Membership of the Neighbourhoods and Environment Scrutiny Committee

Councillors - Igbon (Chair), Azra Ali, Appleby, Chohan, Flanagan, Harland, Hassan, Hewitson, J Hughes, Jeavons, Kilpatrick, J C Lyons, Noor, J Reid, Sadler, Strong, White and Wright

Agenda

1. Urgent Business

To consider any items which the Chair has agreed to have submitted as urgent.

2. Appeals

To consider any appeals from the public against refusal to allow inspection of background documents and/or the inclusion of items in the confidential part of the agenda.

3. Interests

To allow Members an opportunity to [a] declare any personal, prejudicial or disclosable pecuniary interests they might have in any items which appear on this agenda; and [b] record any items from which they are precluded from voting as a result of Council Tax/Council rent arrears; [c] the existence and nature of party whipping arrangements in respect of any item to be considered at this meeting. Members with a personal interest should declare that at the start of the item under consideration. If Members also have a prejudicial or disclosable pecuniary interest they must withdraw from the meeting during the consideration of the item.

4. Minutes 7 - 14

To approve as a correct record the minutes of the meeting held on 10 October 2018.

- 5. [10.05-10.30] Improving Road Safety around Schools To follow
- 6. [10.30-10.50] Highways Reactive Maintenance To follow
- 7. [10.50-11.15] Highways and the flow of traffic in the City Centre To follow
- 8. [11.15-11.35] Sprinkler and fire safety works update
 Report of the Strategic Director (Development)

15 - 50

Following the Grenfell Tower tragedy Executive received reports in June, September and December 2017. In the December 2017 report the Council committed to installing sprinklers, subject to surveys, consultation and receiving updated costs, in all Councilowned tower blocks as well as to implement fire safety works recommended by Type 4 Fire Risk Assessments.

This report provides an update and recommends additional approvals in relation to the 24 Council-owned tower blocks managed by Northwards Housing, 11 tower blocks managed by two PFI-funded contractors and Woodward Court managed by homelessness.

It does not cover in detail those blocks managed by PFI contractors in Miles Platting (7) and Brunswick (4), nor does it include privately owned blocks.

This is an Executive report. Members are invited to comment prior to submission to Executive.

9. [11.35-11.55] Playing Our Full Part on Climate Change - Updating Manchester's Commitment

51 - 82

Report of the Deputy Chief Executive

This report provides the Committee and Executive with an update on the recent work undertaken by the Tyndall Centre for Climate Research which recommends the establishment of a carbon budget for Manchester. Adopting this carbon budget would mean committing the city to a target of becoming zero carbon by 2038 rather the existing 2050 target. The Manchester Climate Change Board have developed an outline proposal setting out how all partners and residents in the city might play their full part in achieving this ambition and this is included as an appendix to this report.

This is an Executive report. Members are invited to comment prior to submission to Executive.

10. [11.55-12.05] Overview Report

83 - 94

Report of the Governance and Scrutiny Support Unit

This report includes details of the key decisions due to be taken that are relevant to the Committee's remit as well as an update on actions resulting from the Committee's recommendations. The report also includes the Committee's work programme, which the Committee is asked to agree.

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.

The Council wants to consult people as fully as possible before making decisions that affect them. Members of the public do not have a right to speak at meetings but may do so if invited by the Chair. If you have a special interest in an item on the agenda and want to speak, tell the Committee Officer, who will pass on your request to the Chair. Groups of people will usually be asked to nominate a spokesperson. The Council wants its meetings to be as open as possible but occasionally there will be some confidential business. Brief reasons for confidentiality will be shown on the agenda sheet.

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Smoking is not allowed in Council buildings.

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:

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This agenda was issued on **Tuesday, 30 October 2018** by the Governance and Scrutiny Support Unit, Manchester City Council, Level 3, Town Hall Extension (Mount Street Elevation), Manchester M60 2LA

Neighbourhoods and Environment Scrutiny Committee

Minutes of the meeting held on 10 October 2018

Present:

Councillor Igbon – in the Chair Councillors Appleby, Harland, Hewitson, Hughes, Jeavons, Kilpatrick, Lyons, Reid, Sadler, White and Wright

Councillor Akbar, Executive Member for Neighbourhoods
Councillor Stogia, Executive Member for Environment, Planning and Transport

Councillor Davies, Member for Deansgate ward Clare Benson, Hulme resident

Apologies: Councillors Azra Ali and Noor

NESC/18/40 Minutes

Decision

To approve the minutes of the meeting held on 5 September 2018 as a correct record.

NESC/18/41 Waste, Recycling and Street Cleansing Update

The Committee heard from a resident of Hulme, Clare Benson who had been invited to inform Members of her experience in her neighbourhood in relation to waste. She said that she had become concerned about the levels of debris accumulating in her neighbourhood and had decided to take action. She explained that she had set up a local campaign, including the use of social media to organise communal clean ups to improve the local environment.

The Committee then considered the report of the Chief Operating Officer which provided an update on progress in delivering waste, recycling and street cleansing services (including ward level cleansing), cycle lane cleansing, weed control and the apartment service change. The report also included information on flytipping, and the role of planning to address issues of waste associated with both domestic and commercial properties; permitted development and its impact on waste and the impact of short term lets on flytipping.

Officers referred to the main points and themes within the report which included:-

- The financial context in which all of these services were delivered;
- Operational performance of Biffa, following commencement of their contract in July 2015, noting that Biffa were responsible for providing domestic residual and recycling waste collection services; planned and reactive street cleansing services for defined land types;

- Information on the Service Improvement Plan implemented by Biffa in February 2017:
- Performance data measured across a range of activities that included bin collection; cleaning of communal passageways; street cleaning services; district centres and city centre cleaning; litter bins and flytipping;
- Leaf removal activity noting that the leaf removal programme in 2017/18 delivered an improved leaf removal plan, compared to 2016/17;
- Weed removal services, noting that the standard required Biffa to complete two cycles of weed treatment across the City on an annual basis. This included all highways for which the City has maintenance responsibilities;
- The approach adopted to the cleansing and leaf removal in cycle lanes;
- The approach to the gritting of highways;
- An update on the first phase of apartment service changes and the lessons learnt;
- The approach adopted to the education, engagement and enforcement to improve levels of recycling, including information on the partnership work with the national charity WRAP (Waste and Resources Action Programme) to deliver a range of campaigns with residents;
- Activities undertaken to address issues associated with commercial waste and flytipping on private land;
- The waste management considerations when assessing planning applications; and
- Planning legislation in relation to short term lets and permitted development.

Some of the key points that arose from the Committee's discussions were:-

- The Biffa contact and how this was monitored and their use of agency staff and zero hour contracts;
- How effective was the monitoring of the service provided by Biffa and who undertook this;
- Who was responsible for removing side waste;
- Could the scheduling of road sweeping be coordinated to follow bin collections;
- The problems associated with flytipping and the response to this issue;
- The cleaning of communal bin areas and lighting of these areas;
- The cleansing of gated alleys and the associated difficulties;
- The removal of contaminated bins;
- The cleaning of public litter bins;
- Leaf cleaning of both pavement and cycle lanes;
- What was being done to address the issue of commercial waste including litter and debris, such as discarded cigarette butts and takeaway cartons associated with the night time economy;
- Recycling rates in apartments;
- The importance of behaviour change and education to improve rates of recycling across this city; and
- The need to publicise widely when prosecutions had taken place to act as a deterrent.

The Committee heard from Councillor Davies, Member for Deansgate ward who commented on the good relationships she and other ward Members had established with the managers at Biffa and that the Biffa operatives she had engaged with had

been very professional. However she expressed concern that the cleanliness of the on street bins was inconsistent, stating that poorly maintained and dirty bins gave a very poor impression to residents; visitors to the city and people working in the city. She further commented that bins were not emptied on a daily basis and sought clarification as to what the agreement was for emptying on street bins and asked if inspectors just looked at the waste or did they consider what the cause of any waste was.

The Strategic Lead: Waste, Recycling and Street Cleansing Services responded to the questions and comments from the Committee by informing them that Biffa were responsible for removing any side waste that was presented when bins were collected, however it was stated that if residents recycled effectively this would reduce the need for additional side waste to be collected. In regard to road sweeping she said that this did generally occur after bin collection however encouraged Members to contact the relevant Neighbourhood Team if they experienced persistent problems.

In regard to Bulky Waste collections the Strategic Lead: Waste, Recycling and Street Cleansing Services advised that teams would only collect what had been requested for collection, stating that this avoided any counter claims against operatives taking items that they should not have. She said that if operatives witnessed any flytipping they should then report it to be collected. The same applied to contaminated bins, stating that if crews were unable to accept a bin because it was contaminated this should be reported immediately to the correct team who should then arrange for the collection of the bin. Members were asked to report any issues if this was not happening and it would be pursued with Biffa.

In response to the discussion around the Biffa contract the Strategic Lead: Waste, Recycling and Street Cleansing Services informed Members that Biffa did not use zero hour contracts and the agencies used by Biffa to cover any staffing capacity issues at times would be subject to Biffa's procurement process. To reassure the Committee she advised that the contract would be checked to ensure this was the case. The Chair recommended that a referral should be made to the Ethical Procurement and Contract Management Subgroup to review the Biffa contract to ensure that zero hour contracts are not used.

With regard to the monitoring of staff and their behaviour following observations of Members the Strategic Lead: Waste, Recycling and Street Cleansing Services confirmed that it was Biffa who were responsible for this. She said that Biffa's vehicles were now equipped with CCTV cameras that could be used to monitor staff activities and practices as a way of improving performance and standards.

In response to performance monitoring the Strategic Lead: Waste, Recycling and Street Cleansing Services described that inspections were undertaken by both City Council and Biffa staff to provide an assurance that standards were maintained; areas for improvement identified and solutions implemented. In addition to this the cleanliness of streets was also independently assessed and reported by Keep Britain Tidy noting that Manchester compared favourably to other core cities.

With regard to the cleaning of alley ways and communal bins the Strategic Lead: Waste, Recycling and Street Cleansing Services reported that a deep clean of alley ways was to be undertaken every quarter and Biffa were responsible for quality inspection checks following a clean. In addition these areas were expected to be cleared of any rubbish that may occur following a bin collection. She said an assurance and evidence of this was being requested of Biffa to ensure this was routinely undertaken. She further confirmed that Biffa were responsible for ensuring that any gated alley was locked following a collection and if any locks were faulty they should be immediately reported. She also advised that a bespoke review of the cleaning of communal bins and passageways would be undertaken to address the issues associated with these areas.

The Strategic Lead: Waste, Recycling and Street Cleansing Services informed Members that the cleaning of on street litter bins should be undertaken once per year and accepted that bins in certain locations were problematic as a result of continued vandalism and graffiti. She clarified that bins would be emptied when they are full as assessed by Biffa operatives and continued by commenting that the location of bins could be reviewed to ensure they were being used most effectively noting that the number of complaints received about on street bins was low, clarifying how complaints were counted.

The Neighbourhood Compliance Manager (Citywide) responded to the comments regarding flytipping by informing the Committee that cases were investigated and pursued for prosecution. He said that following prosecution press releases were prepared and that had made both local and national news. In addition to this social media was utilised to promote the message that this antisocial behaviour would not be tolerated and perpetrators would be pursued. He also advised that targeted work had been undertaken to address the issue of commercial waste, describing that premises had been required to provide evidence of their waste management contacts and where these had not been in place formal notices had been served. He said a successful exercise had been undertaken in the China Town area of the city centre following complaints raised by residents and local Members regarding commercial waste and he also described an exercise undertaken to address builder's waste that had resulted in prosecutions and vehicle seizure.

The Strategic Lead: Waste, Recycling and Street Cleansing Services said that work was ongoing with Biffa to address concerns raised about cleanliness and commercial waste in the city centre. She said that discussions were underway with CityCo to develop links with local businesses to address issues that were raised. She said that a number of workshops would be organised to facilitate this and an input from Members would be welcomed. In response to a specific question she confirmed that the Northern Quarter area of the city centre was routinely inspected and solutions to problems identified, such as spillage caused when collecting rubbish would be addressed.

The Section Planning Manager commented that commercial waste management was a condition of planning consent and if a premises were found to be in breach of these enforcement action could be taken. The Chair requested that the planning conditions relating to waste management be circulate to Members of the Committee for information.

In regard to recycling rates in apartment blocks the Strategic Lead: Waste, Recycling and Street Cleansing Services said that the capacity of collections remained unchanged and if the Member wished to discuss specific concerns outside of the meeting she would be happy to meet with him. She said that in the initial stages of Phase One additional collections had been arranged to support tenants during the changes.

The Executive Member for Environment, Planning and Transport responded to the comments regarding the lighting of communal bin areas by saying that if there were specific areas of concern these could be looked at with a view to finding solutions. In response to the issue of leaf clearing and gullies she said that although this remained a challenge work was ongoing with teams to work smarter to deliver this service. The Strategic Lead: Waste, Recycling and Street Cleansing Services said that in segregated cycle lanes liquid de-icer would be used rather than using grit.

The Executive Member for Neighbourhoods stated that despite of the financial cuts imposed on the Council improvements across the city in rates of recycling had been achieved over the previous eight years, and he was confident that this would continue to improve. He said that the rates of recycling activity was different across different types of tenure and behaviour change amongst residents was important to increase levels of this activity and commended the positive approach demonstrated by the resident who had addressed the Committee. He said by adopting the Our Manchester approach residents would be empowered to initiate local solutions and community projects. He said that a lot of proactive work was undertaken by officers to address and prosecute those responsible for flytipping and he encouraged all Members to retweet those messages when action was successfully taken, stating that this would give residents confidence that this issue was taken very seriously by the Council and would also act as a deterrent.

The Executive Member for Neighbourhoods further gave an assurance that the Biffa contract was continually monitored to ensure improvements were made, noting that when issues had been identified previously improvement plans had been agreed and implemented. In response to a suggestion that the bulky waste collections policy should be changed he said that this would need to be discussed further.

Decisions

The Committee:-

- 1. Requests that the planning conditions relating to waste management be circulated to Members of the Committee:
- 2. Requests that the leaf clearing and gritting schedule be circulated to Members of the Committee;
- 3. Recommends that gulley cleaners are deployed in a timely manner to address the issue of blocked gullies;

- 4. Suggests that positive stories regarding resident engagement and community activities to improve their local neighbourhoods should to be promoted, and Members need to engage with residents in these activities.
- 5. Recommends that the Ethical Procurement and Contract Management Subgroup review the Biffa contract to ensure that zero hour contracts are not used.

[Councillor Appleby declared a personal and non prejudicial interest in this item as her partner is an employee of Biffa]

NESC/18/42 Keep Manchester Tidy Update

The Committee considered the report of the Chief Operating Officer that provided Members with an update on the Keep Manchester Tidy campaign.

Officers referred to the main points and themes within the report which included:-

- Providing a background to Keep Manchester Tidy following feedback from the Manchester Strategy consultation exercise;
- A schedule of activities planned for 2018/19; and
- Information on how the impact of these activities are to be collected and measured;

Some of the key points that arose from the Committee's discussions were:-

- The need to reduce the use of single use plastics, noting that this contributed to litter in the immediate areas and contributed to wider, global issues of pollution and this impact this had on the environment and wildlife;
- Schools needed to be supported to undertake activities, education and campaigns around this issue;
- Licensing conditions needed to me used to address the issue of litter association with takeaways; and
- Why was Manchester not engaging with the campaign to tackle discarded chewing gum.

The Strategic Lead: Waste, Recycling and Street Cleansing Services agreed that schools played an important role in promoting this area of activity, in addition to other important areas such air quality and road safety, however it was recognised that teachers needed support to deliver this and this was being looked into.

In response to the issue of takeaways the Strategic Lead: Waste, Recycling and Street Cleansing Services said that good relationships had been established with the national brands and they had supported local campaigns around this issue of litter.

The Strategic Lead: Waste, Recycling and Street Cleansing Services noted the comments regarding chewing gum, commenting that currently this was removed using steam cleaning. She said that whilst this was not a current campaign, consideration could be given to future campaigns to specifically address this issue.

Members gave examples of resident and community groups in their respective wards who arranged regular litter picks and clean ups, noting that a lot of litter in district centres was related to the night time economy, such as discarded cigarette butts and broken glass. The Chair recommended that a Task and Finish Group should be established to look at good practice, hear from resident groups of their experience and how this could be used to support groups in other areas of the city. The Members supported this recommendation.

Decision

The Committee recommends that a Task and Finish Group be established to look at good practice, hear from resident groups of their experience and how this could be used to support groups in other areas of the city.

NESC/18/43 Overview Report

The report of the Governance and Scrutiny Support Unit which contained key decisions within the Committee's remit and responses to previous recommendations was submitted for comment. Members were also invited to agree the Committee's future work programme.

A Member requested that an update report on Improving Road Safety Around Schools that had been considered at the July meeting be added to the Work Programme. The Chair said that she would speak with the relevant Executive Member and schedule this report for an appropriate meeting.

Decisions

The Committee notes the report and approve the work programme.



Manchester City Council Report for Resolution

Report to: Neighbourhoods and Environment Scrutiny Committee - 7 November 2018

Executive – 14 November 2018 Council - 28 November 2018

Subject: Sprinkler and fire safety works update

Report of: Strategic Director (Development)

Summary

Following the Grenfell Tower tragedy Executive received reports in June, September and December 2017. In the December 2017 report the Council committed to installing sprinklers, subject to surveys, consultation and receiving updated costs, in all Councilowned tower blocks as well as to implement fire safety works recommended by Type 4 Fire Risk Assessments.

This report provides an update and recommends additional approvals in relation to the 24 Council-owned tower blocks managed by Northwards Housing, 11 tower blocks managed by two PFI-funded contractors and Woodward Court managed by homelessness.

It does not cover in detail those blocks managed by PFI contractors in Miles Platting (7) and Brunswick (4), nor does it include privately owned blocks.

Recommendations

1. Neighbourhoods and Environment Scrutiny Committee is invited to comment on the content of this report.

2. Executive

- Is requested to **note** the progress made since December 2017.
- Is requested to **note** that the consultation undertaken demonstrated significant support for sprinklers but also that a minority of residents are strongly opposed.
- Is requested to **note** the support for sprinklers from Greater Manchester Fire and Rescue Service and National Fire Chiefs Council. The Prime Minister has also recently endorsed retrospective fitting of sprinklers to publicly-owned tower blocks.
- Is **recommended** to continue to proceed with fitting sprinklers, but give residents the ability to decline having sprinklers installed in their flat as long as they have

first been given the opportunity to understand the benefits and risks as outlined in paragraph 3.8.

- Is requested to **note** that the overall budget for sprinkler installation across 35 tower blocks (Whitebeck Court extra care scheme already has a sprinkler system) remains, as estimated, £10.5m approved by Executive in December 2017 and that these systems will have a 30-year life. These costs are being met within the Housing Revenue Account (HRA) through the rephrasing of the Public Sector Capital Programme.
- Is recommended to approve that the initial installation of sprinklers is offered to leaseholders free of charge at an estimated cost of £240k (to include Miles Platting and Brunswick PFI leaseholders) from the Council's General Fund Housing Private Sector Capital Programme as detailed in paragraph 4.4. This is in addition to the £10.5m sprinkler budget identified above, and will require an increase of £240k to the Private Sector Housing capital budget. However, leaseholders will be required to meet the estimated £167 annual repair and maintenance costs.
- Is requested to **note** that the fire safety works recommended by the fire risk assessor, Savills, are mandatory and is asked to **recommend** to Council that the budget for these fire safety works should be increased from £4.0m to £5.2m as the budget request to Executive in February 2018 did not include the tower blocks managed by PFI contractors in Miles Platting and Brunswick and Woodward Court. This will require an increase of £1.2m to the Public Sector Capital Programme from revenue contributions from the HRA.
- Is requested to **note** that the contracts for sprinklers and fire safety works (plus the other works included in those contracts) include contingency but otherwise place cost risk on the Council, with Northwards Housing managing these contracts on the Council's behalf to mitigate against further costs. Further costs are, however, possible as the sample surveys undertaken may not have identified the full extent of works.
- Is recommended to approve the revenue costs associated with maintaining sprinkler systems as outlined in the revenue consequences section of this report and in paragraph 4.3. Negotiations will be held with Northwards and the PFI providers with regard to the additional revenue funding required, and any subsequent increase in the budget will be met from the Housing Revenue Account.
- Is requested, where access is denied by tenants or leaseholders to implement fire safety works, to **delegate authority** to take legal action, where required, to the City Solicitor in discussion with the City Treasurer, Director of Housing and Residential Growth, Executive Member for Housing and Regeneration and Executive Member for Finance and Human Resources.

3. Council

• is asked to **approve** a capital budget increase for these fire safety works of £1.2m (from £4.0m to £5.2m) to include the tower blocks managed by PFI contractors in Miles Platting and Brunswick and Woodward Court in the capital programme. This will require an increase of £1.2m to the Public Sector Housing Capital Programme funded from revenue contributions from the HRA.

Wards Affected:

Ardwick, Baguley, Charlestown, Cheetham, Crumpsall, Gorton North and South, Harpurhey, Higher Blackley, Hulme, Miles Platting & Newton Heath, Northenden, Rusholme, Sharston and Woodhouse Park

Manchester Strategy outcomes	Summary of the contribution to the strategy
A thriving and sustainable city: supporting a diverse and distinctive economy that creates jobs and opportunities	The Council has continued to work with partners to drive forward major development schemes that provide safe accommodation, stimulate economic growth and job creation.
A highly skilled city: world class and home grown talent sustaining the city's economic success	The City aims to provide safe accommodation which encourages people worldwide to visit, keeping those with the skills the City needs, keeping our home grown professionals.
A progressive and equitable city: making a positive contribution by unlocking the potential of our communities	Everyone will have the same opportunities and life chances no matter where they're born or live in safe accommodation. Voluntary and community groups will find new ways to reach those as yet untouched by Manchester's success to create resilient and vibrant communities.
A liveable and low carbon city: a destination of choice to live, visit, work	The right mix of quality safe accommodation is needed to support growth and ensure that our growing population can live and work in the city and enjoy a good quality of life.
A connected city: world class infrastructure and connectivity to drive growth	The City's transport system has an enormous influence on the lives and prospects of Manchester's residents. To enable people to access jobs we are creating efficient transport systems that link residential communities to employment centres.

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

- Equal Opportunities Policy
- Risk Management
- Legal Considerations

Financial Consequences - Revenue

The initial installation of sprinkler systems is capital expenditure. However, the systems will require annual inspection and parts will need periodic renewal. It is estimated by Northwards Housing that it will cost in the region of £167 per annum per flat to maintain the systems during their 30-year life. This is made up of £35 annual maintenance and £132 on average per annum to cover periodic lifecycle replacement costs. There are 2328 properties and the additional annual cost will be £389k, of which £9k relates to leasehold properties and will be recharged. These revenue costs will be met from existing budgets.

The Council and its contractors (Northwards Housing and two PFI-funded contractors) Northwards Housing will include the annual inspection in their servicing programme and cover any one-off maintenance costs within their overall repairs and maintenance budget. Subject to agreement at today's meeting, the Council will charge leaseholders for the actual repair and maintenance cost.

The Council's insurers have indicated that if the Council installs sprinklers in every flat in a block they would be prepared to remove the excess charge in the event of a fire. They have, however, indicated that there would be very little difference in the annual premium.

Financial Consequences - Capital

Executive agreed a budget of £10.5m in December 2017 for sprinkler works to 35 Council-owned blocks (including those in PFI projects), based on high level estimates at that time. This was estimated as £7.2m for the 23 blocks managed by Northwards Housing, plus Woodward Court, and £3.3m for the blocks managed by the PFI contractors. Since then Northwards Housing have undertaken 3 tender exercises (covering 13 of the 24 blocks which are the subject of this report) and at current prices the overall capital budget required is in line with the original approval of £10.5m, including contingency. This assumes the tower blocks managed by PFI contractors will incur similar costs, which will be reviewed at a later stage.

Alongside the sprinkler installation the contractors will be undertaking other fire safety works legally required as a result of Type 4 Fire Risk Assessments. The value of these works, following a number of sample surveys, has been estimated by Northwards Housing's fire risk assessor at £4m for the tower blocks (£3.6m) and retirement homes (£0.4m). The budget approval in February 2018 only included the properties managed by Northwards Housing. Assuming these costs are similar in the other 12 the overall cost of Type 4 Fire Risk Assessment (FRA) works is likely to be c.£5.2m. However, the full scope and cost will be determined once detailed inspections are carried out in each flat under the building contracts.

The sprinkler installation and Type 4 FRA works will be funded from capital via the Housing Revenue Account (HRA).

The 30-year life of the sprinkler system means that in 30 years time the Council would need to budget for its renewal. As the HRA model is a 30-year rolling model this does not currently feature in the model but will be added in a year's time.

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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.

Report to Executive 28 June 2017 Report to Executive 13 September 2017 Report to Executive 13 December 2017

1.0 Introduction

- 1.1 The following recommendations were approved by Executive at its meeting in December 2017:
 - Executive is requested to note the work undertaken to date
 - Executive is recommended to approve the installation of sprinklers within Council-owned tower blocks following consultation with residents at an estimated cost of £10.5 million for a full installation in each flat.
- 1.2 On 13 December 2017 Executive received and approved the report 'Grenfell Tower Update on the Implications for Manchester' in which the following was reported:
 - The Council believed that sprinklers ought to be fitted to each of the high rise blocks it owns (in both common areas and individual flats).
 - That once Type 4 Fire Risk Assessments (FRAs) had been prepared and consultation had taken place with tenants and leaseholders through the High Rise Forum the Council would be able to make a final decision whether to install sprinklers.
 - Subject to consultation, there was a recommendation to locate sprinklers where recommended by residents and Greater Manchester Fire and Rescue Service (GMFRS).
 - The estimated cost for retrofitting sprinklers to Northwards Housing's flats was £7.5m (£10.5m including PFI blocks) but any future capital costs would be reported to Executive for approval.

2.0 Current position

2.1 Budget approval

2.1.1 Following the December 2017 Executive report an instruction was given to Northwards Housing in line with the Council's Capital Approval Process and Governance rules. Northwards Housing then commissioned a specialist to undertake selective Type 4 Fire Risk Assessments in a range of flat types across the properties they manage. Once they had received the detailed reports they began the procurement of the works. An initial Business Case was submitted to the Capital Strategy Board for approval, and was signed off by the City Treasurer and the Executive Member for Finance & Human Resources.

2.2 Procurement

- 2.2.1 To ensure value for money and minimise resident disruption the Council and Northwards Housing agreed to procure:
 - Sprinkler and other fire protection works recommended by the Type 4 FRAs (such as compartmentation) together.

- These fire safety works alongside other improvement works already in the capital programme (e.g. new window frames).
- These collective works in clusters of tower blocks.
- 2.2.2 Northwards Housing have procured a preferred contractor to undertake these works, with appropriately skilled subcontractors for the sprinkler and fire safety works elements. An EU compliant framework has been used.
- 2.2.3 Having selected the contractor team earlier in the year Northwards Housing have benefited from their expertise in finalising the design of the sprinkler works, combined with the expertise of fire risk assessor Savills in specifying the fire safety works.

2.3 Technical Approvals

2.3.1 The contractor is working closely with the Council's Building Control team to secure appropriate approvals. An initial demonstration flat was set up by Northwards Housing and observed by one of the Building Control team, with further demonstration flats having since been set up in blocks across the Northwards Housing area to enable residents to view the proposed sprinkler system. 210 residents have visited the demonstration flats to date.

2.4 Type 4 Fire Risk Assessments

- 2.4.1 Type 4 FRAs give more detailed assessments of a building's potential performance in the event of a fire and detail what work is required to meet the current fire performance standards in relation to means of escape and evacuation, occupants' safety, the ability of the building to resist the spread of fire and the means of detecting and fighting fires within the building. In part these involve intrusive investigation behind walls, ductwork and other hidden spaces where fire could circumvent the designed fire breaks if the breaks are not installed correctly or have been breached by previous maintenance works.
- 2.4.2 Northwards Housing engaged Savills to undertake Type 4 FRAs in a representative sample of properties in each tower block that they manage (and also in Woodward Court which is managed by the Council's homelessness service). The sample represented different types of flats on different elevations across the property portfolio. 115 Type 4 FRAs were carried out across the 1615 flats in the 24 tower blocks.

3.0 Consultation

3.1 In the report to Executive in December 2017 the following consultation arrangements were proposed:

"Once sufficient Type 4 FRAs have been carried out, and an assessment of the quality of compartmentation has been made by fire risk assessors, the Council

will be able to undertake consultation with tenants and leaseholders in tower blocks about retrofitting sprinklers. Consultation will be carried out with members of the High Rise Forum (covering properties in north Manchester managed by Northwards Housing) ...

One of the key decisions to be addressed will be whether or not, on completion of all Type 4 FRA works, the Council then commits to installing sprinklers in each individual flat ... Fundamentally, type 4 FRAs will offer a high level of assurance that the compartmentation of the flats is secure and that in the event of a fire, it will be contained as designed, allowing the Fire Service to deal with the fire within the flat.

Once the consultation has been completed, Executive is recommended to approve the installation of sprinklers in the locations recommended by residents and GMFRS. Funding provision for the installation of sprinklers will have to be provided for within the HRA capital programme although this will have an impact on other programmed capital works, unless central Government is prepared to assist".

- 3.2 Northwards Housing have met with the High Rise Forum on 4 occasions December 2017, March 2018, June 2018 and August 2018 and have discussed the installation of sprinklers on each occasion. GMFRS have also attended at least 2 of these meetings to provide advice to the Forum.
- 3.3 As explained above Northwards Housing have also prepared demonstration flats and over 200 residents have so far visited these and the majority were either supportive of the Council's proposal to install sprinklers or made no comment, with a small minority expressing concerns. However, in Collyhurst a large number of residents visiting the demonstration flat strongly expressed their disapproval about the proposals and stated that they did not want sprinklers and would not allow access for the works. Some concern was also expressed by a small number of Newton Heath residents.
- 3.4 Whilst the December report stated that the Council would review the decision to install sprinklers once the Type 4 Fire Risk Assessments and/or works were undertaken the consultation has focused more on how the work will be carried out rather than whether it was necessary. This approach has been taken because officers believe that installing sprinklers will create a further layer of protection for individual residents (and for the block overall) even after the Type 4 FRA works improve the compartmentation.
- 3.5 The Council needs to carefully weigh up the pros and cons arising from this consultation and other relevant information.
- 3.6 The retrospective fitting of sprinklers is recommended by the GMFRS and the National Fire Chiefs Council (see Appendix 1 and 2). The retrofitting of sprinklers in publicly-owned tower blocks has also been supported by the Prime Minister in

- a recent article in the Housing trade magazine Inside Housing. Building regulations also now require sprinklers for all new build tower blocks that has a floor at or above 30m high (approx. 10 storeys). Since 1 January 2016 it has been mandatory to install sprinklers in every new residential building in Wales.
- 3.7 However, at the same time the recent Social Housing Green Paper stresses the importance of attaching weight to tenants' wishes.
- 3.8 On balance, the recommendation made in this report is to allow residents to make their own choice, but having first been given every opportunity to understand the benefits and risks of sprinklers. The sprinkler system can be designed to allow this flexibility.
- 3.9 Further information dealing with some of the concerns raised by residents about sprinklers and the substance of the Council's responses can be found in Appendix 3 of this report and a report on the effectiveness of sprinklers is included at Appendix 4.
- 3.10 Once Type 4 FRA works have been completed to improve the compartmentation it is essential that the Council educates its contractors and residents so that they do not undertake any work to the property which might undermine the integrity of the fire safety works. We will work with our managing agents (Northwards Housing, Avro Hollows Tenant Management Organisation, Renaissance Miles Platting Ltd and Solutions for Brunswick, along with staff managing Woodward Court) to give them practical advice to enable them to make informed decisions about the risk mitigation they must take to avoid breaching the compartmentation. Resident newsletters and other media will be used to inform residents of their responsibility to not undertake any works which might result in fire safety works being compromised.

4.0 Budget

4.1 Sprinklers – capital

- 4.1.1 In December 2017 we estimated, based on knowledge at that time, that the cost of installing sprinklers in the 35 tower blocks would be around £300,000 per block. The apportioned cost for the number of blocks managed by Northwards Housing (plus Woodward Court) was approximately £7.2m, with a further £3.3m for the 11 PFI tower blocks.
- 4.1.2 Northwards Housing undertook some initial design work and estimated that the overall cost would be nearer to £6m for the blocks they manage and Woodward Court and sought capital budget approval for this amount.
- 4.1.3 Following the selection of a sprinkler installation contractor further work has been identified and following the 3 tenders undertaken to date (covering 13 tower

- blocks) the overall cost of the work to all 24 tower blocks has increased by around £1.4m. This can still be contained within the overall budget agreed.
- 4.1.4 The estimated cost of installing the sprinkler system increased due to a change in the scope of works required. In particular, the following work is recommended:
 - Additional sprinkler pump (standby should the duty pump fail).
 - Uninterrupted power supply (battery back-up system to provide power in the event of the power to the blocks failing).
 - Additional costs associated with boxing in.
 - · Lockable cabinets on each floor.
 - Sounders (alarm bells) in each flat.
 - Extension of the sprinkler system into the enclosed balcony (in Collyhurst).
- 4.1.5 The first two additional items were not originally included but are recommended measures, according to the British Standard guidance, to be considered where there is a higher than average risk profile. The FRA consultant, Savills, recommended that the Council include these for all of the tower blocks.
- 4.2 Fire safety works capital
- 4.2.1 Whilst the Government has made available funding for replacing unsafe cladding on social rented tower blocks this does not extend to the fire safety works included in this paper. In the February 2018 budget report to Executive, an estimated budget of £4m was approved to undertake other fire safety works which have been identified as a result of the Type 4 FRAs in tower blocks and retirement homes managed by Northwards Housing. Increased approval of £1.2m is sought from Executive in this report to increase the budget from £4m to £5.2m in total for the FRA works to cover the estimated cost of works to tower blocks managed by the PFI contractors and Woodward Court.
- 4.3 Sprinklers revenue
- 4.3.1 The estimated cost of maintenance of the sprinkler system is £35 per annum per flat. The system will be inspected each year and this will be included within Northwards Housing's annual servicing programme.
- 4.3.2 During the 30 years there are certain parts which will periodically need replacing such as the pumps, the back-up batteries, alarms and sounders, and the control panel. The estimated cost is £132 per flat per annum at today's prices and funding will be allocated within the Northwards Housing management fee in the relevant years.
- 4.3.3 Detailed costings will be negotiated with the PFI contractors in due course taking into account the experience with Northwards Housing.

4.4 Leaseholders

- 4.4.1 The Council believes that all residents in tower blocks ought to have the opportunity to have sprinklers installed. It acknowledges, however, that these are unexpected costs and at an estimated cost of £4,540 per flat would be likely to cause financial hardship for most leaseholders. It is, therefore, recommended that Executive agree that the initial installation will be provided to leaseholders, who want sprinklers installed, free of charge. However, those that opt to have the sprinklers will be required to meet the annual repair and maintenance cost and the cost of future replacement parts and system renewal through their service charge which will be on average £167 per annum at today's prices. As these costs vary from year-to-year (from £35 per annum to £945 per annum depending on the work required) leaseholders will be offered the opportunity to pay into an interest-bearing sinking fund to spread these costs.
- 4.4.2 There are currently 29 leaseholders in tower blocks managed by Northwards Housing and the estimated cost to the Council of supplying sprinklers free of charge will be c.£130k if all leaseholders opted to have them installed.
- 4.4.3 Executive should also be aware that there are at present 25 leaseholders in the Brunswick and Miles Platting PFI contract areas and, therefore, free installation will cost the Council approximately £240,000 in total. As the work is to leasehold, not tenanted, properties this funding should be provided from the Council's General Fund Housing Private Sector Capital Programme.

4.5 Potential savings

4.5.1 The capital and revenue costs described above assume that 100% of tenants and leaseholders take up the option of sprinklers. If they do not, there may be scope for savings. Likewise a level of contingency is assumed in the capital costs for sprinklers and fire safety works, which may not be needed in full. However, as explained, the Council is taking cost risk on these contracts and the costs could, therefore, increase, including possible legal costs if tenants/leaseholders prevent access for fire safety works. Therefore no specific savings assumed but if they arrive they will be returned to the HRA capital programme.

5.0 Risk

- 5.1 Subject to the decisions being made in this report, the Council would be entering into a series of contracts at the same (or similar) time for all 24 tower blocks referred to above. This approach is being taken because of the need to complete fire safety works within the timetable recommended by the fire risk assessor.
- 5.2 The contracts place cost risk with the Council for sprinkler installation, fire safety works and other works (window replacement etc). It is not unusual for the Council to take cost risk for items within the capital programme. However, risk is increased somewhat by the fact that the Type 4 FRA works cost estimates are

based on sample surveys. The actual costs will be clarified within the scope of the contract, with contingency in place to mitigate this risk. Northwards Housing has explored the scope for cost risk transfer or cost risk share with the preferred contractor on the fire risk works but they are unable to confidently price such risk sharing. A higher level of contingency is included on the fire safety works as a result.

- 5.3 Delays in decision-making about the contents of this report could lead to the specialist sprinkler subcontractor being unavailable and the Council needing to deliver the fire safety works under a separate contract to ensure they are delivered within the timetable recommended by the fire risk assessor. If the sprinkler works were then progressed later this could be at additional cost as the economies of scale of the larger contract would no longer be available.
- 5.4 There is always a potential risk of procurement challenge, such as from competitors. However, Northwards Housing have used a EU-compliant procurement method (which they have to be given the value of the works) and have already taken, and will continue to take, relevant legal advice prior to signing any contracts.
- 5.5 Whilst, subject to approval today, Executive agrees that tenants and leaseholders can decide whether they want sprinklers installed or not, the Council must undertake the works identified in the Type 4 FRAs. Therefore, within the contracts, the Council will require the contractor to gain access to each flat to inspect the compartmentation and carry out any works identified in the FRAs. Failure by the tenant or leaseholder to allow access could, ultimately, require the Council to take legal action which would both potentially increase the cost and cause delays to the programme of works.
- 5.6 If Executive decided not to proceed with the installation of sprinklers in flats in tower blocks there is a risk of significant negative publicity as it had previously agreed to the installation.
- 5.7 There is a potential risk that the Government may in the future decide to offer local authorities funding to cover some or all of the cost of fire safety works, including sprinkler installation. In carrying out the works before any announcement, the Council could miss the opportunity to claim financial support in the future. However, whilst the Prime Minister is supportive of the retrospective fitting of sprinklers, no announcement was made at the Conservative Party Conference in October 2018 and we are not aware that the Government are working on any funding proposals.
- 5.8 There is a risk that following the Grenfell Inquiry, and other ongoing technical work, the Government prescribes a different fire safety solution or a different type of sprinkler system than the one the Council is procuring. However, the chosen solution has been developed in discussion with GMFRS and the fire risk assessor, Savills.

5.9 There is a general fire safety risk until all of the work identified in the Type 4 FRAs is completed, although the fire risk assessor Savills has suggested completion dates for each item of work and Northwards Housing is programming its work accordingly.

6.0 Conclusion

- 6.1 Following December's report to Executive Northwards Housing have undertaken consultation with representatives of the High Rise Forum and have held a number of Open Days in show flats across the properties they manage.
- The majority of residents welcome the Council's proposal to install sprinklers in their flat to improve their personal safety. However, there has been a significant number of residents in the Collyhurst blocks, and a few in Newton Heath, who have stated strongly that they do not want sprinklers.
- 6.3 Local and national fire service organisations, and our Building Control manager support the retrofitting of sprinklers in tower blocks and this has been further endorsed by the Prime Minister.
- 6.4 However, if residents are adamant that they do not want sprinklers and have been given the opportunity to understand the benefits of them and risks of not having them installed then Executive is recommended to agree that they can make this choice.
- 6.5 The overall scope of the sprinkler installation works to be carried out in each block has increased since Northwards Housing undertook initial design work but currently remains within budget. However, further budget approval is required to cover Type 4 FRA fire safety works in tower blocks in Miles Platting, Brunswick and Woodward Court as this was not requested in February 2018.
- 6.6 Budget approval is also required to cover the cost of free sprinkler installation in leasehold properties, with leaseholders covering the annual maintenance costs, and to cover the annual maintenance of the sprinkler systems in Council tower blocks.
- 6.7 Executive is asked to approve all of the recommendations identified in this report

7.0 Contributing to the Manchester Strategy

- (a) A thriving and sustainable city
- 7.1 The delivery of providing safe accommodation could provide the opportunity for an increase in employment across the various schemes.
 - (b) A highly skilled city

- 7.2 The provision of safe accommodation will encourage young people and graduates, to be attracted to apprenticeships and work placements
 - (c) A progressive and equitable city
- 7.3 The planning process of the schemes will encourage residents to get involved and influence decision making for providing safe accommodation.
 - (d) A liveable and low carbon city
- 7.4 The right mix of quality safe accommodation is needed to support growth and ensure that our growing population can live and work in the city and enjoy a good quality of life.
 - (e) A connected city
- 7.5 Implementation of safe accommodation across the City. The work will reinforce the City's role as the centre of providing safe accommodation.

8.0 Key Policies and Considerations

- (a) Equal Opportunities
- 8.1 The recommendations in this report allow residents who might experience above average difficulty evacuating a block from staying in situ should a fire arise.
 - (b) Risk Management
- 8.2 A detailed section on specific risks has been included in this report
 The City Council's Short Term Financial Strategy includes an assessment of
 budget risk for implementing fire safety measures.
 - (c) Legal Considerations
- 8.3 As this work develops we may need to work with legal colleagues to ensure the contractor can gain access to undertake any necessary inspections and fire safety works that may be required.

Appendix 1 - Greater Manchester Fire and Rescue Service (GMFRS) Website Statement - 20th September 2018

Position statement

It is the position of both the National Fire Chiefs Council (NFCC) and GMFRS, that sprinklers are an invaluable active fire safety feature that saves lives in the event of a fire, reducing both property damage and the business impact on the premises

SPRINKLERS CAN:

- · Reduce death and injury from fire
- Reduce the risks to fire fighters
- Protect property and heritage
- Reduce the effects of arson
- Reduce the environmental impact of fire
- Reduce fire costs and the disruption to the community and business
- Permit design freedoms and encourage innovative, inclusive and sustainable architecture

More questions answered...

Why are sprinklers important for life safety?

In a large, fast moving fire people often do not know which way to go and may not be able to use hose reels or fire extinguishers.

Sprinklers are completely automatic. They work by themselves and can stop heat and smoke from trapping people.

How can we be sure sprinklers will work in a fire?

Most sprinkler systems are very simple. There are normally no moving parts to fail. The pipes are full of water, usually from the mains. The sprinklers over the fire burst open when they get hot and spray water on the fire. If you have water in your pipes the sprinklers will work.

What do sprinklers cost?

The cost will vary depending on what your building is made of, what you store in it, what you use it for and how good your water supply is.

A useful comparison is that sprinklers cost less than carpet. But unlike carpet, which wears out, your sprinkler system will protect you for the life of the building.

How do sprinklers operate?

Fire sprinklers are individually heat-activated and connected to a network of water pipes. When the heat from the fire plumes hot gases reach the sprinkler and at a specific temperature (usually about 68 deg. C) that sprinkler activates delivering water directly to the source of the heat.

Why are sprinklers so effective?

A fire starts small. If detected and tackled early enough a fire can be controlled with very

little water. Fire sprinklers operate automatically even if you are not at home releasing water directly over the source of the fire and sounding the alarm.

How reliable are sprinklers?

Records from Australia and New Zealand (where all fires must be reported) between 1886 and 1986 show that sprinklers controlled 99.7% of all fires where they were fitted.

What about smoke?

Smoke damage is a major cause of loss in fires. In serious cases smoke is the main cause of death. Sprinklers wash the larger particles out of smoke reducing its density and toxicity. In addition the water cools the smoke making it less harmful.

Quick response sprinklers are now available that will attack a fire even earlier in its growth. Fast attack dramatically reduces the amount of smoke that a fire can produce.

What is the life safety record for sprinklers?

Apart from explosions there have never been multiple fatalities in a fully sprinklered building in the United Kingdom.

The total number of deaths from fire, world-wide in sprinklered buildings is only 50 compared to thousands in unprotected buildings. This is a record no other fire system can match.

Can sprinklers reduce damage to the environment?

Sprinklers can increase the sustainability and life expectancy of buildings, by limiting fire development and significantly reducing the amount of smoke, CO2 and other pollutants. Sprinklers use much less water to put a fire out than fire service hoses - and lead to much less water damage.

Do sprinklers allow greater building design freedoms?

Sprinklers can allow much more interesting use of space. New building codes work on a performance-based approach to the safety of a building, so by including sprinklers, designers can achieve greater freedom to fulfil their overall vision. They can include features such as:

- Larger compartment sizes
- More open spatial designs
- Reducing exit door widths
- Reducing periods of fire resistance to elements of structure
- Reducing constraints such as distances between buildings

How sprinklers can benefit different building-types

Residential care homes

Older people, people with mental health problems and those with mobility issues are groups that are most at risk from fire. We consider that all residential care homes should be fitted with sprinklers. In Scotland there is already a requirement within Building Standards for all new build residential care buildings to have automatic fire suppression systems installed and we think that there should be the same level of protection throughout Britain.

Schools

Hundreds of schools in the UK have a fire each year. The impact of these fires is significant, not just in financial terms, but also in terms of the devastating effect on the communities they serve and the disruption to students, teachers and families. The effects on children's education are not confined to lost course work but often include longer travelling times, disrupted social groups and poorer facilities. If sprinklers were considered at the design stage of building a new school or the refurbishment of existing buildings, the costs can be kept to a minimum (as low as one per cent of build costs).

Domestic premises

Fires in the home still account for the greatest number of fire deaths and injuries each year. While it would be ideal for all domestic premises to have sprinklers, it is recognised that this is not practical or realistic. We advocate the fitting of sprinklers in the homes of people most at risk from fire - younger people, older people, people with mental health problems and those who have mobility problems. We work in partnership with developers, local authorities and social housing landlords to encourage the installation of sprinklers in the homes of the most vulnerable people.

Commercial premises

There is a compelling case to be made for sprinklers in any commercial premises on the basis of loss of production or interruption to business as this is a real impediment to business continuity and productivity. It is a recognised fact that 85 per cent of small and medium businesses that suffer a serious fire either never recover or cease trading within 18 months. The installation of sprinklers in these types of premises could prevent this. Losses due to fire would reduce and fewer businesses would be forced to relocate.

Appendix 1 (continued)

GMFRS website statement on Myths and Facts about sprinklers

Sprinklers: myths and facts - 23rd March 2016

Sprinklers have been proven to reduce the impact of fire. They are a potentially life saving tool that bring many benefits. There are some common misconceptions about sprinklers that are stopping people installing them. It is important that these sprinkler myths are dispelled.

MYTH: In a fire all the sprinkler heads go off together.

THE TRUTH: Only the sprinkler head(s) directly affected by the fire is triggered.

MYTH: Water from the sprinkler causes more damage than the fire.

THE TRUTH: Sprinklers attack the fire quickly and directly so less water is needed. As they also operate the fire alarm, the flow can be quickly turned off when the fire is out.

MYTH: A smoke detector will always provide enough protection.

THE TRUTH: Operational smoke detectors do save lives, however they do nothing to extinguish a growing fire.

MYTH: Sprinklers go off accidentally.

THE TRUTH: The odds of winning the lottery are greater than the 16 million to one chance of a sprinkler malfunction.

MYTH: Sprinklers are ugly and unsightly.

THE TRUTH: Modern sprinklers are specially designed to meet the needs of architects in offices, hotels, shops, hospitals and prestige buildings. They are compact and elegant. In most buildings the public are usually unaware that sprinklers are fitted.

Miniature sprinklers are little bigger than a 50p piece and are neat and robust. They can be fitted with ceiling rosettes and painted to match any colour scheme.

Concealed sprinklers are recessed and covered by a flat plate flush with the ceiling. They are unobtrusive and almost invisible. Concealed sprinklers are ideal for clean areas, where there is restricted headroom or vandalism is a problem.

MYTH: Sprinklers cause water damage.

THE TRUTH: Reports of water damage from fires in buildings with sprinklers are often exaggerated. Only the sprinklers over a fire open. All the others stay shut. A sprinkler opening by accident is almost unheard of.

Firefighters will use significantly more water from hoses to do the same job as a sprinkler.

A valuable item sprayed with water from a sprinkler as it puts out a fire can usually be recovered or restored. One that is burnt to a cinder and flushed down the drain by a fire hose is another matter!

If there is a fire the water from one or two sprinklers is a small price to pay for saving a complete building, its contents or even a life/lives.



Appendix 2

National Fire Chiefs Council statement on sprinklers February 2018



The professional voice of the UK Fire & Rescue Service

Position Statement

Automatic Water Suppression Systems

NFCC wants to see a greater inclusion of Automatic Water Suppression Systems (AWSS) in the built environment in the UK.

As part of an appropriate package of fire safety measures, sprinklers will save lives, protect property, reduce the impact of fire on the environment and support UK PLC by reducing the interruption to business. Increased adoption of AWSS will also assist search and rescue operations and reduce the risk to firefighters, by restricting the development of a fire.

More widespread use of AWSS will be beneficial in nearly all buildings but in particular, NFCC want to see an increase in use of sprinklers in housing for vulnerable persons, care facilities, high rise accommodation, large volume warehousing, factories, car parks and waste and recycling facilities.

This will be achieved by working with partners to demonstrate the benefits, provide the evidence and advise politicians, developers, designers and the public of the benefits of AWSS. There is already clear evidence of these benefits shown in published national and international research.

NB AWSS includes sprinkler systems, water misting systems, fog systems and such variants that automatically apply water to a developing fire with a view to either extinguish or control the fire

Position Statement

Sprinklers are the most effective way to ensure that fires are suppressed or even extinguished before the fire service can arrive They save lives and reduce injuries, protect firefighters who attend incidents and reduce the amount of damage to both property and the environment from fire

In the last 12 months, the National Fire Chiefs Council (NFCC) and the National Fire Sprinkler Network (NFSN) have worked together to investigate the effectiveness and reliability of sprinkler systems. The evidence produced indicates that sprinkler systems operate on 94% of occasions demonstrating very high reliability Furthermore, it is evident that when they do operate they extinguish or contain the fire on 99% of occasions and are thus very effective. The research also found that in both converted and purpose built flats that sprinklers are 100% effective in controlling fires.

NFCC recognise that sprinklers are an effective part of an overall fire safety solution and can be used efficiently to improve fire safety in a range of new and existing buildings NFCC support the concept of risk assessed retro fitting of sprinklers in existing buildings and would also welcome the prioritisation of a review of the Building Regulations (Approved Document B) to ensure fire safety requirements keep pace with new building developments. NFCC supports the mandatory installation of sprinkler systems in certain types of higher risk buildings such as nursing homes, and single staircase high rise buildings as two examples

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NFCC supported by NFSN are focused on developing understanding and acceptance to promote the wider use of sprinklers Together we will continue the efforts in the coming months to

- Educate the public and building owners to dispel the myths and understand the be(nefrts of sprinklers
- Provide clear guidance on their consideration and implementation as part of a fire safety strategy
- Provide clear guidance within the service on their ongoing maintenance and operational considerations.

Current Position (February 2018)

In regard to the review of Approved Document B (ADB):

- NFCC support the urgent review of ADB and recommend that the thresholds that set the requirements for sprinkler systems should be refreshed to mirror the Scottish standards for new buildings In addition NFCC recommend specific additional requirements in respect of existing high rise residential buildings are incorporated into the new ADB
- NFCC recommend premises designed for the care of vulnerable persons such as care homes, supported living, houses in multiple occupation, etc, and should be fitted with a suitable sprinkler system.

In regard to high rise buildings:

- NFCC recommend that the review of ADB specifies that sprinklers are a
 requirement in all **new** high rise residential structures above 18m (or as defined in
 any revised Approved Document B) Student accommodation should be included in
 this category of building.
- In respect of existing high rise residential buildings, NFCC recommend that where high
 rise residential buildings currently exceed 30m there should be a requirement to retro fit
 sprinklers when these buildings are scheduled to be refurbished Furthermore, NFCC
 recommend that sprinklers should be retro fitted where high rise residential buildings
 over 30 metres are served by a single staircase
- NFCC will support fire and rescue services who are receiving enquiries from, and providing support to local authorities and Housing / Residents Associations, which are committing to install sprinklers in their high-rise stock

In regard to car parks:

- Evidence derived from global research and research conducted by the Building Research Establishment (BRE), which demonstrates the effectiveness of sprinklers controlling fires in car parks shows that the incidence of fatalities and injuries is zero and the property loss is around 95% lower than that of an uncontrolled fire. NFCC's position in relation to car parks is as follows
- NFCC recommend that consideration is given to installing sprinklers in open sided car
 parks to protect property, including the fabric of the building. While there have been
 few incidences of fatalities in car parks there have been recorded fatalities to
 firefighters due to structural collapse abroad.
- NFCC strongly recommends that enclosed car parks should be fitted with sprinklers, as is common in Europe and also recommended by NFPA 88 in the USA

 NFCC strongly recommends that basement car parks, and in particular those with associated accommodation above, are fitted with sprinklers This is a common requirement in Europe and recommended by NFPA 88 in the USA Research undertaken by the <u>BRE in 2010</u> also support this approach

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- NFCC strongly recommends that automated car parks are protected by sprinkler systems due to the extra density of fire loading created by stacking cars in carousel or racking systems Increasingly this is being recommended globally and is also required by NFPA 88.
- NFCC calls for more research into fires and car parks and the design of car parks NFCC believe the current design does not take into consideration the fire loading of modern vehicles, electric vehicles, LPG vehicle and also the risk of running fuel fires from plastic fuel tanks

In regard to other building types:

- NFCC recommend that sprinklers continue to be fitted in new schools unless the risk is deemed exceptionally low in line with the original intention of BB100. To drive consistency NFCC recommend a standard approach is adopted to conducting the risk assessment, with the loophole closed whereby an alternative is sought to avoid installing sprinklers when a risk assessment deems them other than low risk.
- NFCC recommend the review of ADB includes lowering the threshold for the requirement to fit sprinklers in large structures such as warehousing to 4,000 square metres (NFCC are supporting research to assess the ability of firefighters to safely perform rescues from large structures such as warehouses Based on the early results of this research suggests 4000M²)
- NFCC recommend that sprinklers are provided in **new residential care** premises and specialised housing.
- NFCC recommend that sprinklers are provided in facilities providing waste management and recycling There is growing evidence that sprinklers are highly effective in controlling fires in these establishments Uncontrolled fires in waste and recycling facilities are often prolonged, extremely resource intensive for fire and rescue services and partner authorities They are also commonly disruptive to local communities and to travel infrastructure

Background Information

In particular NFCC will work with the following key partners to deliver the objective National Fire Sprinkler Network (NFSN) British Automatic Fire Sprinkler Association (BAFSA)

Business Sprinkler Alliance (BSA)

All Party Parliamentary Fire Safety and Rescue Group (APPFSRG)

European Fire Sprinkler Network (EFSN)

These stakeholders are very closely aligned with our current objectives and much of this alignment is achieved through the NFSN The list is not extensive and there are other stakeholders such as the Fire Brigades Union, International Fire Sprinkler Association and the Association of British Insurers

There is much research available on the effectiveness of sprinklers nationally and internationally The most recent UK research was commissioned by NFCC and NFSN Below are some of the key UK based, independent research into the benefits of sprinklers

Efficiency and Effectiveness of Sprinklers in the United Kingdom.

- Sprinklers are 94% efficient in their ability to operate
- Sprinklers are 99% effective in extinguishing or controlling a fire

Sheffield Low Rise Sprinkler Retrofit

- Sheffield City council identified a serious fire risk potential in a specific type of property in their property portfolio with a decision taken to install a suppression system in 540 individual ranch style properties sited in four locations
- A successful activation protected a vulnerable resident.

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Safer High Rise Living Callow Mount Retrofit

- A project funded and directed by the British Automatic Fire Sprinkler Association (BAFSA) for the Sprinkler Coordination Group (SCG) with the main objective of seeing if it was practical to fit a sprinkler system without relocating residents in a high rise block
- 13 storey tower block, which had been achieved at a lower cost than had previously been thought to be the case, and with modest disruption to residents
- Average cost per flat was £1,150 (at 2012 prices) An analysis of retrofitting work in high rise residential blocks completed from 2012-2017 by the <u>Residential Sprinkler</u> Association confirms that costs per flat average between £1500 and £2500

Environmental Impact of the effectiveness of Sprinklers in Warehousing Fires

- Report demonstrating clearly that whole-life benefits outweigh the costs and that there are environmental benefits for including sprinklers in warehousing
- Research informs us that from warehouse fires alone, businesses lose over £230m annually, in addition to nearly 1,000 jobs The Association of British Insurers (ABI) have called to make sprinklers compulsory in warehouses in the UK
- The <u>International Fire Protection Magazine website</u> provides further information, including a link to the <u>Business Sprinkler Alliance website</u> where two publications can be found on the environmental impact and cost benefit analysis for fire sprinklers in warehouse buildings

Cost Benefit Analysis of Sprinklers BRE Report

- Sprinklers are cost beneficial in the following premises.
 - Bedsits of six units or more,
 - Most purpose built blocks of flats;
 - All Care Homes.

The Impact of Automatic Sprinklers on Building Design

- The Association of British Insurers (ABI) raise awareness in the industry on the beneficial impact of incorporating automatic sprinklers into building design. This independent report, provides those involved in the design and construction industry with useful and helpful information on the design implications of automatic sprinklers and outlines how sprinklers add value to building design
- Unlike most other reference sources it focuses on the commercial and design
 impacts of automatic sprinklers rather than fire safety The introduction of Sprinklers
 provides many benefits including life safety, business protection and sustainability
 By looking at different building types/design options, this report identifies the capital
 and lifestyle costs, design benefits and flexibility, as well as the potential to reduce
 the construction programme
- It also supports the view that sprinklers should be considered early on in the design process, dispelling the myths about cost and design freedoms
- The full report can be accessed here <u>The Impact of Automatic Sprinklers on Building</u> Design

In general there is very little conflicting evidence globally. Most research identifies the cost benefits of sprinklers in a wide range of accommodation.

We will continue to work with our partners to dispel the myths that have grown around sprinklers due to consistent misrepresentation in the global media especially the way sprinklers are portrayed in feature films, advertisements and television programmes.

Page 4 of 6Automatic Water Suppression Systems Position StatementFebruary 2018

Current legislation in the UK

There are differing situations within the United Kingdom

England

In England there is no specific legislation requiring sprinklers since the repeal of local acts The requirements for sprinklers are contained within the guidance of volumes 1 and 2 of Approved Document B to the Building Regulations These requirements apply differently based on building use, sizes and heights There are some relaxations allowed in the requirements for means of escape, compartmentation, fire resistance and fire service access from a voluntary inclusion of sprinklers The inclusion of sprinklers can therefore assist building designers in creating spaces that are more open and useable than would otherwise be acceptable without sprinklers

In respect of schools there is a ministerial expectation that all new and refurbished schools are fitted with sprinklers, unless they are demonstrated to be low risk through the completion of a specified risk assessment tool The NFCC have concerns that this expectation is not being met in the majority of new build schools

Wales

In Wales all new residential premises including Care Premises (plus schools funded by the Welsh Government) must be fitted with sprinklers

Scotland

In Scotland there is a requirement to fit all new Enclosed Shopping Centres, Residential Care Buildings, High Rise Domestic Buildings above 18m, Sheltered Housing Complexes, School Buildings and some warehouses with sprinklers and recognition of the benefits of sprinklers in Technical Standards

Scotland have also taken a position of requiring sprinklers in new high rise structures above 18 metres, whereas in England the threshold is 30 metres

Approach Elsewhere

One of the most notable cases globally is Scottsdale in Arizona where sprinklers have been required in new buildings for over 30 years This has resulted in dramatic reductions in fire losses in terms of both life and property. The impacts have been well documented

There is a varied picture in relation to fitting sprinklers globally

New Zealand has a much simpler <u>standard</u> for residential sprinklers which has resulted in a wider fitting of sprinklers in dwellings.

Most developed countries now require sprinklers in some form in high rise developments. Subject of much interest, and as a result of high rise fires involving cladding, is the increasing move to fit balconies with sprinkler systems

Case Studies

Efficiency and Effectiveness of Sprinklers in the United Kingdom This report contains a number of case studies

<u>Studley Green Experience Ten years on</u> This report details the success on the UK's first large scale fitting of sprinklers in social housing

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Summary of UK Sprinkler Incidents 2016

Residential Flat Fire Bedfordshire

School saved by sprinkler System Hertfordshire

London Teddington School Sprinkler Save

Portable Misting Systems save three lives Derbyshire

There are numerous short case studies on successful sprinkler activations on the NFSN website



Appendix 3 - Concerns raised by residents

What impact will sprinklers have on the wider block?

By introducing the sprinkler systems into the residential blocks it is also necessary for the Council to be satisfied that no new hazards will be introduced into the building without suitable mitigation. It is likely that the tower blocks contain asbestos or asbestos containing materials which are a potential high risk to operatives (and residents) if disturbed during work without the right protections in place. To mitigate this risk a programme of asbestos surveys to common areas and a representative sample of flats is currently in progress. Asbestos reports are then produced for the proposed contractor prior to works commencing and method statements will be prepared by them and assessed by the Northwards Housing capital programme team as part of the contract process before work is allowed to start.

Potential risk of Legionnaire's disease

There has been some concern expressed by a small number of residents during consultation that introducing a wet sprinkler system into properties could create a risk of Legionnaire's disease. However, extensive international research shows that there is no realistic chance of a member of the public contracting Legionella from a sprinkler system when it operates. Current thinking is that the water droplet sizes generated by sprinkler head deflectors are too large to pass through the membranes of the lung and this, together with the fact that the oxygenation, pH and temperature of the water in sprinkler pipes does not provide a suitable environment for the Legionella bacteria to flourish. There is not therefore considered to be a risk to residents. There may be a statistical possibility of a sprinkler maintenance operative contracting the disease if the operative is standing below a sprinkler head that they are removing. However, there are no recorded cases of anyone contracting Legionella from a sprinkler system anywhere in the world. Such risk as might exist for maintenance personnel can be eliminated by adherence to proper working practices.

Water quality testing is carried out on a 6-monthly cycle to our tower blocks at present to identify any issues and this will be extended to include the sprinkler system.

Risk of leakages / water damage

One of the issues raised by residents during the consultation exercise, and in subsequent correspondence, has been the risk of leakages and water damage once sprinkler systems have been installed. Residents are concerned about the risk of damage to personal possessions, furniture etc.

Information obtained from a variety of sources shows that the likelihood of sprinkler systems leaking or setting off unnecessarily is extremely low. Data obtained by Building Control suggests that the likelihood of a system failure is 1 in 16,000,000. In comparison the likelihood of winning the lottery is 1 in 14,000,000.

Appendix 4

Efficiency and Effectiveness of Sprinkler Systems in the United Kingdom: An Analysis from Fire Service Data

May 2017

Summary

- 1. This report provides a detailed analysis of data on fires in premises in the UK in which sprinkler systems were fitted over the period 2011 to 2016. Data were provided by 47 Fire and Rescue Services.
- 2. The cases analysed amounted to 2,294 incidents of which 1,725 (75%) were in nonresidential buildings and 414 (18%) in dwellings.
- 3. The aim of the analysis was to provide an authoritative assessment of the reliability and effectiveness of sprinkler systems in controlling and extinguishing fires and in preventing damage.
- 4. The effectiveness and reliability of sprinklers has been assessed with regard to two key criteria:
- When sprinklers operate how effective are they in extinguishing or controlling fires and

thus preventing damage? (performance effectiveness)

- How reliable are sprinklers in coming into operation when a fire breaks out? (operational reliability)
- 5. In the data set there were 945 cases in which sprinklers were activated. The impact of the sprinkler system is known for 677 fires of these cases. Across all fires for which data were available, the sprinkler systems contained or controlled the fires in 62% of incidents and extinguished the fire in 37% of incidents. Hence, the performance effectiveness of sprinkler systems was 99% across all building types.
- 6. A further measure of effectiveness is obtained by comparing average areas of damage from fires in residential buildings with sprinklers and from all fires in residential buildings. Fires in dwellings where sprinkler systems operated had an average area of fire damage of under 4 sq. m. This compares to an average area of fire damage of 18 to 21 sq. m. for all dwelling fires in England between 2011/12 and 2015/161.

- 7. The average area of fire damage in a non-residential building where a sprinkler system was present2 was 30 sq. m. which is half the average area of fire damage of in comparable "other building" fires in England between 2011/12 and 2015/163
- 8. There were 1316 fires recorded in the data where a sprinkler system was present but did not operate. Information on the reasons why the sprinkler system did not operate was recorded for 879 fires. In 370 of these cases the fire was in an area not covered by the system; in 115 cases the fire was too small to activate the system; in 18 cases the system was turned off; and in 13 cases the fire was extinguished before activation. Only 57 cases out of 879 were identified where the system could have been expected to work but did not. This indicates that the operational reliability of the systems was 94%.
- 9. In brief, this extensive data analysis shows that sprinklers are highly reliable and effective. They work as intended in 94% of cases and control or extinguish fires in 99% of cases.

The full report produced for the National Fire Sprinkler Network and the National Fire Chiefs Council can be found at:

https://www.nationalfirechiefs.org.uk/write/MediaUploads/NFCC%20Guidance%20 publications/Protection/Optimal_Sprinkler_Report.pdf

Manchester City Council Report for Resolution

Report to: Neighbourhoods and Environment Scrutiny Committee - 7 November

2018

Executive - 14 November 2018

Subject: Playing Our Full Part on Climate Change – Updating Manchester's

Commitment

Report of: The Deputy Chief Executive

Summary

This report provides the Committee and Executive with an update on the recent work undertaken by the Tyndall Centre for Climate Research which recommends the establishment of a carbon budget for Manchester. Adopting this carbon budget would mean committing the city to a target of becoming zero carbon by 2038 rather the existing 2050 target. The Manchester Climate Change Board have developed an outline proposal setting out how all partners and residents in the city might play their full part in achieving this ambition and this is included as an appendix to this report.

Recommendations

Neighbourhoods and Environment Scrutiny Committee is invited to comment on the content of this report.

Executive is recommended to:

- a) Adopt the Tyndall Centre's proposed targets and definition of zero carbon on behalf of the city.
- b) Commit to developing a draft action plan by March 2019 and a final detailed plan by March 2020 setting out how the city will ensure that it stays within the proposed carbon budget.
- c) To recognise that by taking urgent action to become a zero carbon city, starting in 2018, we will achieve more benefits for Manchester's residents and businesses up to 2025 and beyond.
- d) Work with partners to ensure that Manchester accelerates its efforts to encourage all residents, businesses and other stakeholders to take action on climate change, starting in 2018.

Wards Affected: All

Manchester Strategy outcomes	Summary of how this report aligns to the OMS
supporting a diverse and	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

jobs and opportunities	goods sector. This will support the implementation of Manchester's emerging Local Industrial Strategy.
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	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.
A liveable and low carbon city: a destination of choice to live, visit, work	Becoming a zero carbon city will 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.

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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.

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 2017

1.0 Background

- 1.1 There is increasing global evidence of the impacts that global warming is already having on the world's climate. Data from the U.S 's National Aeronautics and Space Administration (NASA) and National Oceanic and Atmospheric Administration (NOAA) highlights that:
 - The five warmest years in the global record (which dates back 138 years) have all come in the 2010s;
 - The 10 warmest years on record have all come since 1998;
 - The 20 warmest years on record have all come since 1995.
- 1.2 The evidence points to the fact that the temperature rises that have occurred to date are giving rise to more extreme weather events across the globe. In the UK the predictions point to an increasing likelihood of wetter winters and warmer summers. At a global scale, there is a danger of increasing incidences of water and food shortages as well as flooding in coastal regions as ice sheets melt and global sea levels rise, and more frequent and extreme storms and hurricanes. While direct impacts may be more extreme in other parts of the world, Manchester will be affected by these global impacts and the increasing insecurity that they may cause. There is therefore an urgent need for all cities to consider what they need to do to play their full part in addressing climate change.
- 1.3 In 2015, the Manchester Climate Change Agency (MCCA) was established to support, encourage and enable organisations and individuals in Manchester to contribute towards delivering 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, in particular through the development of new projects and funding bids.
- 1.4 The Our Manchester Strategy sets out the vision for Manchester to "be in the top flight of world-class cities by 2025" and commits the city to "playing our full part in limiting the impacts of climate change and by 2025 will be on a path to being a zero carbon city by 2050".
- 1.5 The Council supports the MCCA and the Manchester Climate Change Board (MCCB) in taking forward work to address climate change and their work with partners across the city. The MCCB is proposing to update its commitment to carbon reduction in the context of achieving the "Our Manchester" objectives and is asking the Council to endorse these ambitious new targets.

2.0 Citywide Targets

2.1 Over the last year, the MCCA has been working with the world renowned Tyndall Centre for Climate Research at the University of Manchester to understand what action Manchester needs to take in order to meet its obligations under the Paris Agreement which was adopted during COP21 in 2015. This work has resulted in a recommendation that the city as a whole adopts new targets which are outlined below;

- Adopt a carbon budget and emit only a maximum of 15 million tonnes CO₂ for the period 2018-2100;
- Commit to a 13% year-on-year reduction in citywide CO₂ emissions from 2018 to achieve this carbon budget; and
- For the city to be zero carbon by 2038.
- 2.2 The proposed definition of zero carbon is based on the Tyndall Centre's recommendation and includes carbon dioxide emission from the energy system only i.e. the gas, electricity and liquid fuels that are used to power and heat homes and businesses and to transport people around the city. Emissions from flights from Manchester Airport are not included in the definition of zero carbon. This is because the Tyndall Centre analysis allocates aviation emissions to a UK-wide aviation carbon budget, rather than allocating emissions to specific local authority areas.
- 2.3 To become a "zero carbon" city by 2038, it is assumed that all sectors will need to reduce emissions by at least 95% from current levels, with the residual 5% being reduced over the period 2038 to 2100. This is due to the difficulty in making further marginal reductions at these reduced levels.
- 2.4 Leading scientific bodies have calculated limits or 'budgets' for the level of carbon dioxide that can be emitted globally, to keep within various ranges of temperature change compared to pre-industrial levels. The Tyndall Centre have transposed a global carbon budget that is "likely" (with 66% to 100% confidence) to stay below 2°C temperature change as agreed in the Paris Agreement. A methodology has been designed and applied to scale down this 'carbon budget' to the UK city regions using a range of apportionment regimes that are ultimately responsible for defining the date by which carbon neutrality could be achieved. Based on this, the recommended carbon budget for the Manchester City Council's local authority boundary equates to 15MtCO₂. More information on the Tyndall Centre's Suggest referencing the Tyndall Centre's methodology can be found on the Manchester Climate Change website: www.manchesterclimate.com/plan
- 2.5 If emissions remained at current levels, there would be less than 7 years of budget remaining. This type of budgeting approach is also referred to as a 'Science Based Target' and is gaining traction with other cities and corporate organisations. At present, there are 20 other cities that are part of the Carbon Neutral Cities Alliance (London being the only other UK city at present), demonstrating that others are adopting similar approaches.

3.0 The Council's Role

3.1 The Council has a number of important roles to play to support the transition to a zero carbon city. The Council's direct CO₂ emissions make up approximately 3% of the city's total with the operational building estate making up nearly two thirds. A significant amount of work has already been undertaken via the rationalisation of the Council's operational estate, energy efficient improvements to Council building, a full LED street lighting replacement programme and the development of a Civic Quarter Heat

Network. The latest data for 2017/18 showed that the Council's total direct CO_2 emissions had reduced by 33.8% since 2009/10, putting the Council on target for a 41% reduction by 2020. An updated version of the Council's Climate Change Action Plan will need to be developed to set out the actions that are required to significantly reduce these emissions.

- 3.2 The Council also has a significant leadership and influencing role across a number of thematic area including the following:
 - 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 efficiency programmes to support private renters and owner occupiers.
 - Transport: Partnership working with TfGM, continuing to promote modal shift from the private car to public transport, cycling and walking by investing in sustainable transport infrastructure, ensuring new developments are close to transport nodes.

4.0 Anticipated Timescales

4.1 The anticipated timescale for this piece of work are as follows:

Action	Timescale
Council endorses the MCCB proposals on behalf of the	November 2018
city, committing the city to revised targets in line with	
scientific evidence.	
Citywide action plan/call to action drafted with all	Nov 2018 –
partners setting out what needs to be achieved and a	February 2019
draft action plan for staying within the carbon budget	
and reaching zero carbon by 2038.	
Draft citywide plan adopted by the Council on behalf of	March 2019
the city.	
Final plan developed with all partners setting out more	April 2019 –
detailed plans for implementation.	February 2020
Final citywide plan adopted by the Council on behalf of	March 2020
the city.	
Implementation of the plan.	April 2020 –
	December 2038

5.0 Conclusion and recommendations

5.1 The MCCB have proposed that the Council adopt the Tyndall Centre's recommendations and include them as part of the Our Manchester and Manchester City Council Policy Framework. The scale of the challenge is significant, but it is clear that a more ambitious target and delivery plan is required for the city to play its full role in limiting the impact of climate change. It is also clear that there are many wider socio-economic benefits of

- transitioning to a zero carbon city which will help to deliver the ambition set out in the Our Manchester Strategy.
- 5.2 While the Council has an important role in providing leadership, in reducing its direct emissions and in setting a supportive policy framework, ultimately meeting the revised target will require action and behavioural change by residents, businesses and institutions across the city. The development of the final plan will therefore require engagement from everyone in Manchester if we are truly to 'play our full part'.
- 5.3 The report attached in Appendix 1 sets out some more information about the different agencies and sectors that have already begun to work together with their peers to a make commitment to becoming zero carbon.
- 5.4 The recommendations are listed at the front of this report.

PLAYING OUR FULL PART

How Manchester's Residents and Businesses Can Benefit from Ambitious Action on Climate Change



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- 3. How Residents Will Benefit and How They Can Get Involved
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Commitment to Act

Executive Summary

The *Our Manchester* Strategy sets out the vision for Manchester to 'be in the top flight of world-class cities by 2025' and commits the city to 'playing our full part in limiting the impacts of climate change'.

This document has been produced by Manchester Climate Change Board to make four proposals to Manchester City Council and the city more widely:

- Proposal one: Manchester adopts the Tyndall Centre's proposed targets and definition of zero carbon and includes them formally in the *Our Manchester* and Manchester City Council policy framework. Namely: a limited carbon budget of 15m tonnes CO₂ for 2018-2100; 13% year-onyear reductions in CO₂ from 2018; zero carbon by 2038.
- Proposal two: Manchester recognises that action on climate change is a fundamental part of achieving the city's 2025 vision and objectives. And by taking urgent action to become a zero carbon city, starting in 2018, we will achieve more benefits for Manchester's residents and businesses up to 2025 and beyond.
- Proposal three: Manchester accelerates its efforts to mobilise all residents, businesses and other stakeholders to take action on climate change, starting in 2018.
- Proposal four: Manchester puts in place an action plan and the resources needed to stay within the proposed carbon budget, starting in 2018.

We are publishing this document in October 2018 with the aim that Manchester City Council endorses it during November 2018 and formally includes it as part of the *Our Manchester* and Manchester City Council policy framework. We hope it will also help support the development of a Greater Manchester commitment to zero carbon 2038, in time for the next Greater Manchester Green Summit in March 2019.

The Board are also inviting all organisations that work in the city to commit to be part of Manchester's collective action on climate change.



1. Introduction

In March 2016 the *Our Manchester* Strategy was launched, setting out the vision for Manchester to 'be in the top flight of world-class cities by 2025' and committing the city to 'playing our full part in limiting the impacts of climate change'.

The strategy is underpinned by the comments of residents, businesses and stakeholders who commented on the draft strategy, with around one-third stating that climate change action and environmental improvement needed to be core parts of Manchester's further development.

Over two and a half years since the launch of Our Manchester, the climate science and political landscape has continued to evolve. 2018 has provided us with further impetus for urgent action on climate change. Extreme weather linked to climate change has wrought devastation around the world over the last 12 months. From Athens to the Arctic Circle, tinderbox dry conditions set Europe on fire this summer, including the moorlands on our own doorstop. Hurricane Michael left 'unimaginable destruction' in Florida, adding to the 385 billion dollars' worth of damage from hurricanes in 2017. Flash floods in Majorca claimed the lives of UK tourists in October 2018. All on top of the floods and droughts that continues to plague countries where many of Manchester's residents have family and friends, including Bangladesh, India, and Pakistan. There is now no corner of the planet that is not affected by the impacts of climate change, Manchester included.

However, there is some room for hope. The latest report by the Intergovernmental Panel on Climate Change report sets out that it is not too late to limit global warming to 1.5°C – but only if urgent action is taken now.

This year Manchester Climate Change Board has been working with the Tyndall Centre for Climate Change Research at the University of Manchester to understand what action Manchester needs to take. As a starting point Tyndall have recommended that Manchester should adopt new targets: a limited carbon budget of 15m tonnes CO_2 for the period 2018-2100, 13% year-on-year reductions in citywide CO_2 emissions, starting from 2018, and for the city to be zero carbon by 2038.

This document has been produced by the Manchester Climate Change Board and Agency to take forward these recommendations.

We are publishing this document in October 2018 with the aim that Manchester City Council endorses it during November 2018 and includes it as part of the *Our Manchester* and Manchester City Council policy framework. We hope it will also help support the development of a Greater Manchester commitment to zero carbon 2038, in time for the next Greater Manchester Green Summit in March 2019.

Manchester is a city well-known for leading change that benefits its residents and businesses and providing inspiration for others to follow. We have the opportunity to do that again, on the one subject that is already and will increasingly define the quality of life for everyone on the planet, throughout the 21st century and beyond. We look forward to working with Manchester City Council and partners to make this opportunity a reality.

Gavin Elliott

Chair, Manchester Climate Change Board Member of the *Our Manchester* Forum

2. Our Manchester and Updating Our Climate Change Commitments

2.1 The Board's Commitment to the Our Manchester Vision and Objectives

The *Our Manchester* Strategy for 2016-25 sets out the vision for Manchester to 'be in the top flight of world-class cities by 2025' and commits the city to achieve five headline objectives:

- A thriving and sustainable city: supporting a diverse and distinctive economy that creates jobs and opportunities;
- A highly skilled city: world-class and homegrown 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 and work;
- A connected city: world-class infrastructure and connectivity to drive growth.

The chair of the Manchester Climate Change Board is part of the *Our Manchester* Forum, working with partners to drive forward the city's climate change agenda as an integrated and mutually supportive part of the city's wider strategy.

2.2 Updating Our Climate Change Commitments

When *Our Manchester* was published in 2016 'playing our full part' included in its definition that Manchester 'will be on a path to being a zero carbon city by 2050'. During 2018, the Manchester Climate Change Board has been working with the Tyndall Centre for Climate Change Research at the University of Manchester to ensure the city's commitments are up-to-date.

The Tyndall Centre's analysis recommends that, in order to make a fair contribution to the Paris Agreement Manchester should adopt the following targets:

- Adopt the carbon budget and only emit a maximum of 15m tonnes CO₂ during the period 2018-2100 (our 'carbon budget'),
- Which means reduce CO₂ emissions by 13%-year-on-year, starting from 2018, and
- Become a zero carbon city by 2038.

Our proposed definition of zero carbon is based on the Tyndall Centre's recommendation: the point beyond which Greater Manchester's average annual carbon emissions fall to below 0.6MtCO₂/yr (i.e. over 97% lower than 1990 levels). This includes carbon dioxide emissions from the energy system only, i.e. the gas, electricity and liquid fuels used to power and heat our homes and businesses and to transport us around the city.

Some scenario modelling was then undertaken using the SCATTER¹ tool, covering the following activities on a GPC² aligned emissions inventory:

- Low carbon energy supply Protecting Manchester's residents and businesses against future energy price shocks while accelerating grid decarbonisation.
- Domestic buildings Reducing energy demand and shifting to lower carbon heat sources, lifting families out of fuel poverty, saving residents money on their energy bills as well as reducing greenhouse gas emissions.
- Commercial buildings Reducing energy demand for heating, cooling, hot water and appliances, along with shifting away from gas heating.
- Transport Shifting to Ultra Low Emissions Vehicles (ULEVs) in addition to reducing travelling distances and shifting to healthier (active travel such as cycling and walking) modes of transport.
- Waste Reducing waste while maximising recycling and enhancing the circular economy as well as recovering resources to support bioenergy opportunities.

Within each area, there are emissions reduction activities that are easier to measure and influence than others, for example, buildings which the city or city stakeholders have direct control over. The Board also recognises there are areas of the city's activities that generate CO_2 indirectly and, whilst currently difficult to measure, the city still needs to address these emissions. We expect it will be possible to include them in future definitions of zero carbon when data and monitoring processes improve. In the meantime, the Board proposes Manchester's carbon reduction plans (see Section 7) still

include activity in these indirect areas, but acknowledge that the impacts and monitoring of such initiatives will be more challenging. This includes (and is not limited to):

- Construction materials (supply chain impacts);
- Food (supply chain impacts);
- Consumer products and goods (supply chain impacts);
- Transport emissions (for journeys originating within, but ending outside of, Manchester).

Emissions from flights from Manchester Airport are not included in our definition of zero carbon. This is because the Tyndall Centre analysis allocates aviation emissions to a UK-wide aviation carbon budget, rather than allocating emissions to specific local authority areas. The implication for Manchester and Manchester Airport is that the city needs to contribute to work with UK Government to develop a national plan for managing aviation emissions, as part of a wider UK strategy for reducing emissions in line with the Paris Agreement. However if the UK aviation budget is exceeded Manchester's carbon budget will need to be reduced.

UK Government provide data at local authority level for CO₂ but not for other types of greenhouse gases. These other gases are emitted in the UK from land use, agriculture, waste and industrial process sectors. Manchester does not therefore emit very significant levels of non-CO₂ greenhouses gases. But they do still make a contribution to global climate change, however small. On that basis, if non-CO₂ emission datasets become available in the future, Manchester's targets and the precise definition of zero carbon will need to be reviewed.

Proposal one:

Manchester adopts the Tyndall Centre's proposed targets and definition of zero carbon and includes them formally in the Our Manchester and Manchester City Council policy framework. Namely: a limited carbon budget of 15m tonnes CO_2 for 2018-2100; 13% year-on-year reductions in CO_2 from 2018; zero carbon by 2038.

2.3 How Climate Change Action Can Contribute to Our Manchester Objectives

As well as contributing to global efforts on climate change, the Board believes that meeting these targets will also enable the city to deliver the wider vision and objectives of *Our Manchester*, bringing about more benefits for residents and businesses over the short, medium and long-term.

If the city does not become zero carbon by 2038, the Board believes that this will delay, and may even prevent the realisation of the *Our Manchester* vision and objectives. However, by embedding science-based action on climate change as part of the city's growth and development, the Board believes that this will help Manchester to be:

- A world-class city: Adelaide, Berlin, Copenhagen, Melbourne, New York, Oslo, Portland, Seattle, Stockholm, Vancouver and others are among a rapidly growing group of cities committing to zero carbon and realising the benefits that come as a result.
- A thriving and sustainable city: businesses
 and investors are seeking forward-looking
 cities that recognise the challenges and
 opportunities of the 21st century and can
 provide a resilient economy to support their
 long-term ambitions and success.
- Highly skilled city: today's school leavers and graduates are increasingly looking for cities and businesses that share their ambitions to make a positive contribution to society and the natural environment.

- A progressive and equitable city: action on climate change goes hand-in-hand with improving air quality, lifting people out of fuel poverty, addressing low levels of physical activity and embracing other city priorities, particularly those affecting more deprived areas of the city. By contributing to the global effort on climate change this will also help to limit the impacts in communities around the world, including those in emerging economies who are being disproportionately affected as a result of CO₂ emitted historically by those in more developed countries.
- A liveable and zero carbon city: locally generated renewable energy that creates revenue for local communities and public services, safe walking and cycling routes, homes with low energy bills are all potential options to help us become a zero carbon city.
- A connected city: integrated and wideranging networks of zero carbon public transport and active travel routes are more effective ways to move around cities, avoiding the congestion and pollution that comes from our current modes. Digital infrastructure and teleconferencing can reduce the need for travel.

Proposal two:

Manchester recognises that action on climate change is a fundamental part of achieving the city's 2025 vision and objectives. And by taking urgent action to become a zero carbon city, starting in 2018, we will achieve more benefits for Manchester's residents and businesses up to 2025 and beyond.

2.4 A Collective Effort

Since the development of the city's first climate change strategy in 2009, Manchester: A Certain Future, climate action has been a collective, citywide effort. This approach has resulted in an estimated 34% reduction in CO₂ during 2005-17. It has come about from the actions of local residents, private sector businesses, local charities and not-for-profit organisations, universities, schools and colleges, Manchester City Council, Greater Manchester Combined Authority, other local public sector organisations and decarbonisation of the National Grid through Government policy.



Proposal three:

Manchester accelerates its efforts to mobilise all residents, businesses and other stakeholders to take action on climate change, starting in 2018.

3. How Residents Will Benefit and How They Can Get Involved

Our homes

Our home and our community are at the heart of our lives, providing a place of warmth, security and rest. However, over 34,000 low-income households in Manchester live in fuel poverty, in poorly insulated homes which cost more to heat and are hard to retrofit. The Greater Manchester Business Case estimates that for every 2,000 households supported out of fuel poverty, the potential benefits to the NHS alone (due to reduced winter ill-health and mortality) stand at £1m per year.

Ask any resident would they like to live in a warm and healthy home and save money on their energy bills and the answer would be a resounding yes! Action on our homes needs to support Manchester's most vulnerable residents out of fuel poverty and provide the most energy efficient, low and carbon neutral homes possible. The solution is to reduce energy demand in our homes and put in place systems that allow us to meet this reduced energy demand with renewable and zero carbon fuels. This can be achieved through building new homes to zero carbon homes standard and by retrofitting existing properties to a minimum low carbon standard.

Energiesprong have completed the UK's whole house retrofit trial in Nottingham which has seen over an 80% improvement in the fabric thermal performance of homes.

Longsight, Manchester. The UK's first 'Passive House Plus' retrofit at Erneley Close in Longsight has recently been achieved in Manchester, the learnings from which have the potential to be exploited for the wider benefit of the city.

Manchester Carbon Co-op's whole house retrofit programme

Manchester's Carbon Co-op Carbon Community Green Deal programme has worked with 12 owner occupiers around Greater Manchester to transform their homes to achieve savings in energy bills of between £200 and £600 with one household eliminating their energy bills and generating income from selling energy back to the grid.

http://carbon.coop/content/whole-house-retrofit-community-green-deal



What can we all do now?

See what actions you can do to cut your bills, make your home warmer and more sustainable at **www.eachhomecountsadvice.org.uk**

Things you can do now are:

- Save energy by fitting LED and low energy lighting, turning off appliances when not in use, which could save you £45-£80 a year, install cavity wall insulation, saving around £145 a year and double glaze your home, which could save you up to £120 a year.
- Switch to a renewable energy supplier with the Big Clean Switch and save up to £304 per year

https://bigcleanswitch.org/gm /

 You may be eligible for a Trained Home Energy Advisor to visit your home and provide advice through Local Energy Advice Partnership (LEAP). Check your eligibility at https://applyforleap.org.uk/

- Manchester residents and private landlords can take advantage of a Home Energy Loan Plan (HELP) of up to £10,000 to help pay for energy efficiency improvements and installation
 - http://www.careandrepair-manchester. org.uk/wp-content/uploads/2014/04/Help-Leaflet-web.pdf
- You can also generate your own energy and
 / or heat water for your own use through
 installing renewable technologies such as
 Solar Photovoltaics (PV) and Solar water
 heating and there may be a financial incentive
 to help you paid from Government. Other low
 carbon options include heat pumps, micro
 Combined Heat and Power (CHP), heat
 pumps and wood heating.

https://www.eachhomecountsadvice.org. uk/pages/low-carbon-heating-options

Transport and travelling

Manchester has some of the highest levels of air pollution in Britain, resulting from diesel engines from cars, buses, vans and Heavy Goods Vehicles (HGV's). This is estimated to cause over 1,000 premature deaths every year with central Manchester amongst the highest rate of hospital admissions for asthma in the country. The region has just less than 2 years to cut its illegally high nitrogen dioxide levels which are linked to diseases such as stroke, heart disease, lung cancer, and respiratory infections. With congestion costing businesses in Greater Manchester £1.3 billion annually, we cannot afford to go on with business as usual.

As with housing the solution is to reduce energy demand from transport and provide low and zero carbon infrastructure and transport systems. Infrastructure changes such as bus priority and segregated cycle lanes along Oxford Road provide a safer and more pleasant experience for those who can travel by cycle, walk and take public transport.

All of the city's transport can become emission free by switching to very efficient electric transport including electric cars and by electrification of the rail system. The city's Metrolink trams already run on around 70% renewable energy. For essential car journeys, taxis, business fleet, vans and some light freight vehicles switching to Electric Vehicles (EV) and Ultra Low Emission Vehicles (ULEV) can provide a cheaper, lower maintenance and environmentally friendly. For more information visit:

www.goultralow.com/why-switch/benefits-of-electric-cars/.

Copenhagen has invested in infrastructure to make cycling easier, faster and safer, and has introduced policies that set requirements for bike space per employee for commercial buildings, and bike parking space for residential developments. They have also closed large areas of the city centre for motor vehicles.

Paris is using a sticker system to restrict vehicle access into city centres whereby the most polluting have been banned from the city and other categories may be refused entry to the city on a given day, if air quality is particularly poor.

In Manchester in 2017 Chris Boardman unveiled his vision for "Bee Lines" a fully joined up cycling and walking network of over 1,000 miles connecting communities across Greater Manchester. The network will provide infrastructure for active travel as well as saving the NHS money; evidence suggests that switching to active travel for short motor vehicle trips could save £17bn in NHS costs over a 20-year period, with benefits being accrued within 2 years for some conditions. The largest cost savings would come through reductions in the expected number of cases of type 2 diabetes (annual cost to NHS from diabetes is £9bn).

What can we all do now?

- Walking and cycling more and using the car less is top of the "To do" list for cheap and healthy travel www.tfgm.com/made-tomove/beelines
- The Travel Choices Team can provide details of schemes such as Bike to Work, discounted travel schemes and work and journey planning. Residents and students have their own pages here: http://archive.tfgm.com/ travelchoices/Pages/residents-home.html and http://archive.tfgm.com/travelchoices/ Pages/students.html
- Download the "Get me there" App and plan your journey on the go with real time travel updates.
- For journeys to work find out if you can share a regular journey with another driver at https://www.carsharegm.com/register.aspx





The food we eat, things we buy and waste.

The Manchester zero carbon ambition does not at the moment include embedded (Scope 3) emissions, such as those produced in the growing, production, processing and distribution of crops, livestock and food. However, analysis of the total carbon footprint of Greater Manchester calculated that around 20% of a Mancunians' personal carbon footprint results from food they purchase and consume. The type of food we eat contributes enormously to our carbon footprint; meat and dairy are the most carbon intensive. There is now a perceivable shift in public attitudes towards vegetarian and vegan diets – which is good news for the planet and can lead to added health benefits too.

The other recent lifestyle trend has been the drive to reduce plastic waste. Dubbed "the Blue Planet" effect the accompanying media storm has highlighted the devastating effects of plastics on the environment and in our oceans. Greater Manchester has followed suite with a 'Plastic Free Greater Manchester' campaign which was announced at the Greater Manchester Green Summit in March 2018. This aims to reduce and eventually eradicate singleuse plastics by 2020, supported by 43 hospitality businesses.

More recently there has been a focus on "throwaway" and fast fashion. Landfill sites are now 20% full of throwaway clothes worn a couple of times before being binned. The fashion industry has a devastating environmental effect in countries such as Indonesia and we as consumers are now demanding that being fashionable doesn't need to cost the earth.

What can we all do now?

There are simple everyday actions we can all do now that will help us to eat better, buy smart and produce less waste. As there is a "carbon footprint" attributed to every item we buy there is always a lower carbon way of doing things, such as:

- Choose more plant based foods and eat less meat and dairy; for example by having a Meat Free Monday www.meatfreemondays.com
- Buy local, in season foods and from schemes such as certified Organic, local veg boxes and fish from sustainable sources https:// vegboxpeople.org.uk/
- Choose sustainable products such as Fairtrade, Rainforest Alliance,
- Select items such as food and liquids in minimum packaging, buy in bulk or buy loose from your local grocer or butcher and use your own bag or container,
- Avoid single use items by re-using plastics such as refillable drinks and food containers, re-using carrier bags and having milk delivered by a milk round,
- Choose the most energy efficient electric appliances you can,
- Repair, reduce, reuse, and recycle things wherever possible – from clothes to electric goods.

Ask your politicians to commit to zero carbon

Our politicians have the responsibility to put in place the right policies to help make positive change happen. We can all act now and ask our politicians to commit to helping to create a healthy, prosperous future for all of us. Write to your local councillor and MP and ask them to commit to Zero Carbon Manchester 2038.

www.writetothem.com





4. How Businesses Will Benefit and How They Can Get Involved

The Low Carbon and Environmental Good and Services Sector (LCEGS) is worth £5.4 billion to the Greater Manchester economy and is growing at a rate of 6% per year, employing 38,000 people across over 2,000 businesses. However, all businesses have significant opportunities to reduce their emissions and costs through increasing energy efficiency, reducing wasted energy and resource efficiency.

Greater Manchester's green technologies sector (which includes environmental industries such as renewable energy, water and wastewater treatment, waste management, recovery and recycling) is now performing better than many other global cities of comparable GDP (Gross Domestic Product), such as Berlin, Rome and Copenhagen. Total sales of green technologies and services reached £6.7 billion in 2015/16, which is also comparable with cities of much larger GDP like Toronto, Milan, Seattle and Rotterdam.

Your business can make a commitment today to take action on climate change by signing the Pledge (at the end of this document) and thinking about how you could reduce the energy waste of your building and operations, carry out an energy audit in your workplace and improve the resource efficiency of your business.



By assisting local organisations and companies including some of the city's largest employers to align their strategies with the goals of the Paris Agreement, our carbon budget based approach can help accelerate the transition to a low carbon economy and avoid the worst effects of climate change. There are a number of benefits that a company can expect to see from setting a science-based carbon budget:

- Increased brand reputation: As consumers become increasingly aware of the effects their choices have on the environment, and ethical consumption continues to grow, a brand's reputation for sustainability is of utmost importance.
- Corporate Social Responsibility (CSR): For many companies adopting a carbon budget approach offers a way to deliver the level of corporate responsibility their customers expect of them.
- Investor confidence: Investors are increasingly taking interest in businesses' environmental policies and reporting, as they look to shore up their investments for the future, especially as the "divestment" campaign out of fossil fuel investment gathers pace.
- For multinational retailer Tesco, setting a carbon budget target (net zero by 2050) allowed them to 'demonstrate their seriousness in tackling climate change both to investors and other stakeholders' showing themselves to be a forwardthinking, sustainably-minded company to a new generation of ethical consumers and investors.

- Resilience against regulation and first
 mover advantage: as national governments
 continue to work to implement the Paris
 agreement and to ratchet up the ambition
 of their country-level pledges companies
 can expect to see more regulation to curb
 emissions intensive activities. Aligning early
 with the Paris Agreement early could also
 future proof your business model.
- Increased innovation: With the transition to a low-carbon economy underway and growing in momentum through the UK Government's "Clean Growth Strategy" companies that are aligning their strategies with this step-change are opening themselves up to a world of opportunity.
- Triple bottom line savings: While a frequently heard argument is that low carbon business models comes at too high a cost, companies find that by setting such a target and investing in new low carbon technologies they are ensuring their operations remain lean and efficient, and are building resilience against a future where resources especially those derived from fossil fuels will become increasingly expensive.

Get started now!

If you are wondering where to start there is help available:

The Greater Manchester Growth Company and Green Growth Hub

The Growth Company Business Hub provides tailored support to help small and medium sized businesses in Greater Manchester to boost profitability, cut carbon emissions, improve energy efficiency, and improve products and processes. The Hub provides specialist advisors and services including a virtual Low Carbon Network to help find local suppliers, a fortnightly Green Intelligence e-bulletin and the Green Growth Pledge, which helps companies to celebrate their green commitments and create action plans to reduce their impact.

www.green-growth.org.uk

Green City Business Consortium

A Green City Business Consortium will bring together Greater Manchester businesses looking to make the change from single-use plastics to reusable, recyclable plastics and other alternative materials.

Circular Economy Club Manchester

Manchester's Circular Economy Club hosted by Manchester Metropolitan University provides academic expertise, research and practical experience to help businesses transition to zero waste by embedding the principles of Circular Economy.

Other things you can do now include:

- Switch to a renewable energy tariff http://www.greenintelligence.org.uk/article/ clean-powered-firms-are-more-profitabletheir-peers
- Procurement help LCEGS sector development and job creation by purchasing from local companies http://www.greenintelligence.org.uk/article/ green-tech-greater-manchester
- Switch your Business Fleet to Electric
 Vehicles and save money:
 http://www.greenintelligence.org.uk/article/manchester-could-lead-electric-charge-says-survey
- Become a Carbon Literate Organisation and equip your staff with the knowledge and support they need to transform your business.

www.carbonliteracy.com

Ask your politicians to commit to zero carbon

Our politicians have the responsibility to put in place the right policies to help make positive change happen. We can all act now and ask our politicians to commit to helping to create a healthy, prosperous future for all of us. Write to your local councillor and MP and ask them to commit to Zero Carbon Manchester 2038. The "Write to Them" website provides a free service to help you contact your local politicians https://www.writetothem.com/.

5. Key Partners

Manchester

To meet our climate change targets Manchester has been involving and will need to continue to involve key partners that can directly reduce emissions from their own operations, as well as supporting influencing and enabling other organisations and communities to act.

The Manchester Climate Change Board brings together a number of these key partners, based on their commitment to be part of the city's zero carbon journey. The Board will continue to work on engaging an ever-wider network of partners in the city's climate change efforts, including through the recruitment of Manchester Climate Change Ambassadors. The organisations, sectors and partnerships currently represented on the Board are as follows:

- Commercial property and developers: Chris Oglesby, Chief Executive, Bruntwood
- Electricity North West: Helen Seagrave, Community Energy Manager
- Faith: Dean Rogers Govender, Manchester Cathedral / Chair, Our Faith Our Planet
- Federation of Small Businesses: Holly Bonfield
- Manchester Climate Change Youth Board: Amelia Gilchrist, Ash Farrah, Dan Walsh, Hannah Mitchell, Jonathan Keen, Tudor Baker
- Manchester City Football Club: Pete Bradshaw, Director of Infrastructure and Estates
- Manchester Cultural Leaders Group: Simon Curtis, Chair, Manchester Arts Sustainability Team / Head of Production, Royal Exchange

- Manchester Housing Providers
 Partnership: Ian Thomson, Executive
 Director, Johnnie Johnson Housing
- Manchester Metropolitan University: Prof. Liz Price, Head of School of Science and the Environment
- Media: Steve Connor, Chief Executive, Creative Concern
- University of Manchester: Prof. James Evans, Sustainability Lead and Manchester Urban Institute

Greater Manchester

In addition to city-based partners, Manchester will need to work with Greater Manchester (GM) colleagues and their stakeholders in the other nine local authorities and the GM Combined Authority. This will be particularly important when we need to secure additional powers and funding through Devolution, new national Government policies, as well as establishing city-region programmes that can attract investment, expertise and supply chains more readily than on a district-by-district basis.

UK Government

On 15th October 2018 the Government formally instructed the Committee on Climate Change (CCC) to advise on a Paris aligned carbon budget for the UK. The Board would expect that the UK Government adopts the Committee's recommendations and gives UK cities the powers and funding they will need to make their full contribution to a zero carbon UK.

6. Working with Other Cities and International Partners

Through its membership of the Global Covenant of Mayors, Eurocities and other partnerships Manchester is already part of a global effort on climate change. If we are to realise our aim to be a 'world-class' city we should participate actively in these networks, sharing knowledge and experiences that can help both our own efforts and those of our partner cities. We should also look to strengthen and expand our relationships with cities and other key partners.

A summary of potential opportunities currently known to the Board include:

UK

• UK Core Cities - www.corecities.com

Europe

- Eurocities www.eurocities.eu
- Maintaining links with EU cities and the European Commission, including through Eurocities and existing EU-funded projects

International

- Global Covenant of Mayors and the Edmonton Declaration – https://www. globalcovenantofmayors.org/press/signedmonton-declaration/
- C40 www.c40.org
- Carbon Neutral Cities Alliance http:// carbonneutralcities.org
- ICLEI www.iclei.org
- ICLEI LGMA (Local Governments and Municipal Authorities) initiative for coordinating the input of local authorities as part of the United Nations climate change processes
- United Nations Framework Convention on Climate Change (UNFCCC) – building on the city's engagement to date and looking at the potential for Manchester organisations to participate as 'Observer Organisations' – https://unfccc.int/

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7. Next Steps

Manchester's climate change journey started with the production of our first plan in 2009. The proposals in this document build on our work to date and are designed to help accelerate action across the city. It is informed by the C40's 'Deadline 2020' report, which sets out that, if

they are serious about making a full contribution to global action on climate change, the end of 2020 is the absolute latest date for cities to have a Paris-aligned plan in place and be working towards its delivery.

Proposal four:

Manchester puts in place an action plan and the resources needed to stay within the proposed carbon budget, starting in 2018.

The Board's proposed timetable is:

	City-level	Organisations and sectors	
November 2018	This document endorsed by MCC, on behalf of the city		
November 2018 to February 2019	Citywide action plan drafted with partners	Pledge to get involved and start to develop bespoke plans	
March 2019	Draft citywide plan adopted by MCC, on behalf of the city		
April 2019 to February 2020	Final citywide plan produced with partners	Continue to pledge and develop bespoke plans	
		Support provided to help plan development and preparations for delivery	
March 2020	Final plan adopted by MCC, on behalf of the city		
April 2020 to December 2038	Staying within our carbon budge zero carbon city	at and becoming a world-class	

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8. Further Information and Appendices

This proposal should be read along with the **Technical Appendix 1** which has been produced by Anthesis Group and covers:

- Why act:
 - Health and quality of life
 - Economy and jobs
 - Climate Change
- Policy context
- How to become zero carbon:
 - Current citywide emissions
 - Proposed citywide carbon budget
 - Potential citywide carbon reduction pathway / SCATTER
- What can organisations and sectors do:
 - CO₂ by sector
 - Actions

Appendix 2

The accompanying report of Manchester's recommended Carbon Budget *Quantifying* the *Implications of the Paris Agreement* to *Manchester* by the Tyndall Centre for Climate Change Research at the University of Manchester.

Appendix 3

The Tyndall Centre for Climate Change Research at the University of Manchester has issued a statement about the rationale behind Manchester's carbon budget in the wake of the recent special report from the IPCC. http://ipcc.ch/report/sr15/

This report and the Appendixes can be found on the *www.manchesterclimate.com* website.

To get involved

There are many ways that you can get involved. You can follow MCCA on social media at:

- Facebook: www.facebook.com/McrClimate
- Twitter: www.twitter.com/McrClimate #ZeroCarbonMCR
- Instagram: www.instagram.com/mcrclimate

For further information visit: www.manchesterclimate.com/involved

Feedback on this report

We welcome your feedback. If you have any comments or thoughts on this report please email MCCA at:

info@manchesterclimate.com



Zero Carbon Manchester

Introduction

Manchester has committed to play its full part in limiting the impacts of climate change. According to the latest expert analysis that means emitting a maximum of 15 million tonnes of CO₂ between 2018 and 2100 (our 'carbon budget'), reducing our CO₂ emissions by 13% year-on-year, and becoming a zero carbon city by 2038.

Meeting these targets will make Manchester one of the world's leading cities for action on climate change, bringing us full circle from the industrial revolution to a new zero carbon revolution. It will also mean creating a dynamic and resilient economy where our businesses can thrive and where our residents will have access to good, secure jobs and the highest quality of life.

Manchester Climate Change Board wants all organisations in the city to help realise this vision.

Our Commitment to Act

[Sector/organisation] believes that Manchester should stay within a science-based carbon budget that is aligned with the Paris Agreement and set 2038 as the target date to become a zero carbon city.

[Sector/organisation] believes that all organisations and residents in Manchester need to be part of a collective effort to meet our targets and commits to contribute by:

- Acting now, including accelerating our existing decarbonisation activities, wherever possible,
- Taking responsibility for the CO₂ emissions from our business activities and working to reduce them to zero by 2038,
- Supporting and influencing our customers, residents, suppliers and other stakeholders to take action.
- Defining the support we need and proactively asking for it, including asking politicians for policy changes wherever relevant.

Signed	
Position	
Organisation	





Manchester City Council Report for Resolution

Report to: Neighbourhoods and Environment Scrutiny Committee – 7

November 2018

Subject: Overview Report

Report of: Governance and Scrutiny Support Unit

Summary

This report provides the following information:

Recommendations Monitor

- A summary of key decisions relating to the Committee's remit
- Items for Information
- Work Programme

Recommendation

The Committee is invited to discuss the information provided and agree any changes to the work programme that are necessary.

Contact Officers:

Name: Lee Walker

Position: Scrutiny Support Officer Telephone: 0161 234 3376

Email: I.walker@manchester.gov.uk

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.

None

1. Monitoring Previous Recommendations

This section of the report lists recommendations made by the Neighbourhoods and Environment Scrutiny Committee. Where applicable, responses to each will indicate whether the recommendation will be implemented, and if it will be, how this will be done.

Date	Item	Recommendation	Response	Contact Officer
19 July	NESC/17/31	That a performance dashboard be	A response to this	Richard Elliott
2017	Manchester	established that could be used to	recommendation has been	Head of Policy,
	Climate Change	provide a summary of progress	requested and will be	Partnerships and
	Agency: progress report 2015-17	against the citywide climate change strategy.	circulated once received.	Procurement
10 October	NESC/18/41	Requests that the planning conditions	This information was emailed	Lee Walker
2018	Waste, Recycling	relating to waste management be	to all Members of the Council	Scrutiny Support
	and Street	circulated to Members of the	17 October 2018.	Officer
	Cleansing Update	Committee.		
10 October	NESC/18/41	Requests that the leaf clearing and	This information was emailed	Lee Walker
2018	Waste, Recycling	gritting schedule be circulated to	to all Members of the	Scrutiny Support
	and Street	Members of the Committee.	Committee 22 October 2018.	Officer
	Cleansing Update			
10 October	NESC/18/41	Recommends that the Ethical	The recommendation has	Lee Walker
2018	Waste, Recycling	Procurement and Contract	been forwarded to the Ethical	Scrutiny Support
	and Street	Management Subgroup review the	Procurement and Contract	Officer
	Cleansing Update	Biffa contract to ensure that zero hour	Managements Subgroup	
		contracts are not used.	requesting that they look	
			specifically at the following:	
			1. Agency workers doing	
			permanent roles on lower	
			wage.	
			2. The use of Zero hour	
			contracts.	
			3. Is staff training adequate to	
			complete roles.	

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			4. Ensure that Biffa are fulfilling their contractual obligations; and 5. Are the new vehicles fit for purpose?	
10 October 2018	Keep Manchester Tidy Update	The Committee recommends that a Task and Finish Group be established to look at good practice, hear from resident groups of their experience and how this could be used to support groups in other areas of the city.	The draft Terms of Reference and proposed Work Programme will be submitted to the December meeting for consideration.	Lee Walker Scrutiny Support Officer

2. Key Decisions

The Council is required to publish details of key decisions that will be taken at least 28 days before the decision is due to be taken. Details of key decisions that are due to be taken are published on a monthly basis in the Register of Key Decisions.

A key decision, as defined in the Council's Constitution is an executive decision, which is likely:

- To result in the Council incurring expenditure which is, or the making of savings which are, significant having regard to the Council's budget for the service or function to which the decision relates, or
- To be significant in terms of its effects on communities living or working in an area comprising two or more wards in the area of the city.

The Council Constitution defines 'significant' as being expenditure or savings (including the loss of income or capital receipts) in excess of £500k, providing that is not more than 10% of the gross operating expenditure for any budget heading in the in the Council's Revenue Budget Book, and subject to other defined exceptions.

An extract of the most recent Register of Key Decisions, published on **26 October 2018**, containing details of the decisions under the Committee's remit is included overleaf. This is to keep members informed of what decisions are being taken and to agree, whether to include in the work programme of the Committee.

Decisions that were taken before the publication of this report are marked *

Decision title	What is the decision?	Decision	Planned date	Documents to be	Contact officer details
		maker	of decision	considered	
Clean and Green Fund	Long-term	City	March 2018 or	Requests from	Carol Culley
	improvements to	Treasurer	later	Growth and	0161 234 3590
Ref: 15/025	cleanliness and			Neighbourhoods	carol.culley@manchester.gov.uk
	environment of the			Directorate	
	city.				

Cycle City Ambition Grant Phase 2 – 2015 to November 2018 (part of the Velocity 2025 Programme) Ref: 15/061	To approve the Cycle City Ambition Grant to be delivered within the allocated budget which is set by TfGM. Delegated powers approval(s) to undertake the required works on the highway and Traffic Regulation Order amendments. There are 2 corridors included in this scheme: Chorlton Cycleway	Citywide Highways Manager in consultation with the Executive Member for the Environment	March 2018 or later	Delegated Approvals Report	Mark Stevenson 0161 219 6215 m.stevenson@manchester.gov.u k Nichola McHale 0161 219 6278 n.mchale@manchester.gov.uk
Great Ancoats Street Growth Deal Funding Ref: 15/064	Regional Centre. To obtain approval to carry out the associated highway alterations and statutory legal procedure to process the Traffic Regulation Orders.	Citywide Highways Manager (in consultation with the Executive Member for the Environment)	March 2018 or later	Delegated Approvals report	Mark Stevenson 0161 219 6215 m.stevenson@manchester.gov.u k Val Edwards 0161 219 6522 v.edwards@manchester.gov.uk

		1		1	T
Greater Manchester	Greater Manchester	Director of	March 2018 or	Report and	Emma White
Growth Deal 2, Minor	Growth Deal 2 grant	Highways	later	Recommendation	0161 219 6521
Works Programme	funding has been				e.white@manchester.gov.uk
	made available by the				
Ref: 2016/12/19B	Greater Manchester				Kevin Gillham
	Combined Authority				0161 234 5148
	(GMCA) for a				k.gillham@manchester.gov.uk
	programme of minor				
	works projects. The				
	minor works will				
	comprise highway				
	improvement works				
	which will include a				
	range of measures				
	from pedestrian				
	crossing facilities,				
	parking and footway				
	improvements and				
	traffic calming.				
Highways Investment	The approval of the	The	March 2018 or	Report and	Paul Swann
Programme 2017-18	programmes of	Executive	later	Recommendation	0161 219 2220
to 2021-22	planned maintenance	2,000.00	10.101		p.swann@manchester.gov.uk
3 -32 :	works for the purpose				promanion dotton go riak
Ref: 2017/03/21B	of improving the				
1.0 2017/00/213	condition of the				
	highways network				
	within the City.				
	within the City.				

Neighbourhoods and Environment Scrutiny Committee Work Programme – November 2018

Wednesday 7 Novemb	er 2018, 10am (Report deadline Friday 26 October 201	8)		
Item	Purpose	Lead Executive Member	Lead Officer	Comments
Improving Road Safety around Schools	To receive an update to the report that had been considered by the Committee at the meeting of 18 July 2018. This report will include: 1. A response to the inaccuracies and comments sent by Members following the July meeting and have these been implemented in the plans 2. A full list of work programme in phase 1. 3. Time frame for all the work in phase 1. 4. What consultation with members, schools and residents will happen and the time frame for this activity.	Cllr Stogia	Steve Robinson	The Executive Member for Schools and the Director of Education will be invited to attend.
Highways Reactive Maintenance	To receive a report on the Highways Reactive Maintenance Programme. The report will include information on: • Pothole repairs; and • Drainage and gullies clearance and repairs.	Cllr Stogia	Steve Robinson	
Highways and the Flow of Traffic in the City Centre	The report to include information on: Pavement and footpath conditions – and information on how planned maintenance work is communicated with local residents and businesses.	Cllr Stogia	Steve Robinson	
Installation of Sprinkler Systems in high rise	To receive a report on the approach to installing sprinkler safety systems in high rise blocks.	Cllr Richards	Jon Sawyer	Executive Report

blocks				
Playing Our Full Part on Climate Change -	To provide the Committee with an update on the Tyndall Centre for Climate Research study which	Cllr Stogia	Richard Elliott	Executive Report
Updating Manchester's Commitment	recommends that Manchester adopts a carbon budget which would bring forward the zero carbon target from			
	2050 to 2038. The Committee will also receive a report			
	from the Manchester Climate Change Board which sets out how all partners and residents in the city can play a full role in achieving this ambition.			
Overview Report	This is a monthly report which includes the recommendations monitor, relevant key decisions, the	-	Lee Walker	
	Committee's work programme and any items for information.			

Wednesday 5 December 2018, 10am (Report deadline Friday 23 November 2018)					
Item	Purpose	Lead	Lead Officer	Comments	
		Executive			
		Member			
Greater Manchester	The Committee will receive the full Business Case for	Cllr Stogia	Richard	To be confirmed.	
Clean Air Plan	consideration and consultation.		Elliott		
Cycle City Ambition	An update on work to increase safe cycling routes	Cllr Stogia	Richard		
Grant	across the city. Report to include information on the		Elliott		
	Cycling Policy.				
Annual report on	To receive the annual report setting out activity in	Cllr Akbar	Fiona		
Compliance and	Compliance and Enforcement Services. Report to	Cllr Stogia	Sharkey		
Enforcement Activity	include information on the activities undertaken		Julie		
	around:		Roscoe		
	Enforcement in relation to double yellow line				
	tickets, blocked highways, Hot Food providers and				
	waste contracts and how these are policed;				

Dudget 2010/20	 Enforcement activity undertaken by the Licensing and Out of Hours Compliance Team outside of the city centre area; Tackling counterfeit goods, with particular reference to the Strangeways area. Planning enforcement and legislation relating to the operation of Airbnb. 	Councille	Corol Culler	
Budget 2019/20 Refresh Process: Update for Scrutiny Committees	The Committee will receive a report that sets out the timetable and proposed budget process for 2019/20 and include Directorate budget reports/business plans for consideration.	Councillor Ollerhead (Exec Member for Finance and HR)	Carol Culley	
Draft Terms of Reference and Work Programme for the Behaviour Change and Waste Task and Finish Group	This report sets out the proposed terms of reference and work programme for the Behaviour Change and Waste Task and Finish group.	Cllr Akbar	Lee Walker	See minutes of Neighbourhoods and Environment Scrutiny Committee meeting October 2018.
Overview Report	This is a monthly report which includes the recommendations monitor, relevant key decisions, the Committee's work programme and any items for information.	-	Lee Walker	

Wednesday 9 January	2019, 10am (Report deadline Friday 28 December 201	18)		
Item	Purpose	Lead Executive Member	Lead Officer	Comments
Green and Blue Infrastructure Strategy	To receive the annual progress report on the implementation of the Green and Blue Infrastructure Strategy. This report will include information on the Principles of Tree management.	Cllr Stogia	Richard Elliott	
Manchester Move and the Housing Allocations Policy	To receive a report on Manchester Move and the Housing Allocations Policy.	Cllr Richards	Jon Sawyer	
Delivering the Our Manchester Strategy	This report provides an overview of work undertaken and progress towards the delivery of the Council's priorities as set out in the Our Manchester Strategy for those areas within the portfolio of the Executive Member for Neighbourhoods and the Executive Member for Environment, Planning and Transport.	Cllr Akbar Cllr Stogia	-	
Overview Report	This is a monthly report which includes the recommendations monitor, relevant key decisions, the Committee's work programme and any items for information.	-	Lee Walker	

Wednesday 6 February 2019, 10am (Report deadline Friday 25 January 2019)							
Item	Purpose	Lead Executive Member	Lead Officer	Comments			
Shisha Bars	Update on work to tackle the challenges and issues presented by the City's Shisha Bars.	Cllr Akbar	Fiona Sharkey				
Overview Report	This is a monthly report which includes the recommendations monitor, relevant key decisions, the Committee's work programme and any items for information.	-	Lee Walker				

Items to be scheduled							
Item	Purpose	Lead Executive Member	Lead Officer	Comments			
Air Quality Task and Finish Group – Update report	To receive a report that provides the Committee with an update on the actions taken to progress the recommendations made by the Air Quality Task and Finish Group. The report will include a section specifically on air pollution around schools.	Cllr Stogia Cllr Craig	Richard Elliott	See minutes of NESC November 2017. Ref: NESC/17/53 Invitation to Cllr Paul, Chair of the Air Quality Task and Finish Group			

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