### GREATER MANCHESTER HOUSING PLANNING AND ENVIRONMENT OVERVIEW AND SCRUTINY

### PLEASE NOTE NEW TIME AND VENUE

DATE: Monday, 23rd September, 2019

TIME: 10:30

VENUE: GMCA Boardroom, 1st Floor Churchgate House,

56 Oxford Road, Manchester M1 6EU

### CHAIRS ANNOUNCEMENTS AND URGENT BUSINESS

### 1. APOLOGIES

### 2. DECLARATIONS OF INTEREST 1 - 2

To receive declarations of interest in any item for discussion at the meeting. A blank form for declaring interests has been circulated with the agenda; please ensure that this is returned to the Governance & Scrutiny Officer at the start of the meeting.

### **3.** MINUTES OF THE MEETING HELD ON 11 JULY 2019 3 - 12

To consider the approval of the minutes of the meeting held on 11 July 2019, as a correct record

### 4. BUS REFORM CONSULTATION 13 - 32

Report of Liz Treacy, GMCA Monitoring Officer, Attendance at meeting by Kate Brown, Director of Corporate Affairs

### 5. **DECARBONISING GM EXISTING BUILDINGS** 33 - 86

Report and attendance at meeting by Mark Atherton, Assistant Director Environment, GMCA

### 6. HOUSEHOLD WASTE RECYCLING CENTRE ACCESS POLICY 87 - 108

Report of Eamonn Boylan, Portfolio Lead Chief Executive for Green Cities. Attendance at meeting by David Taylor, Executive Director Waste and Resources GMCA

### **7.** WORK PROGRAMME 109 - 112

Report of Joanne Heron, Statutory Scrutiny Officer, Governance & Scrutiny Team, GMCA

### 8. REGISTER KEY DECISIONS

### 9. DATE AND TIME OF NEXT MEETING

10<sup>th</sup> October 2019 14:00 – 16:00

### Notes:

- The Contact Officer for this agenda is Matt Berry, Governance & Scrutiny, GMCA © 0161 778 7009 ☑ matt.berry@greatermanchester-ca.gov.uk. The Statutory Scrutiny Officer is Joanne Heron © 0161 778 7009 ☑ joanne.heron@greatermanchester-ca.gov.uk
- If any Members require advice on any agenda item involving a
  possible declaration of interest, which could affect their ability to
  speak or vote are advised to contact Matt Berry24 hours in
  advance of the meeting.
- For copies of papers and further information on this meeting please refer to the website <u>www.greatermanchester-ca.gov.uk</u>. Alternatively, contact the above Officer.
- Please note that this meeting will be held in public and will be livestreamed (except where confidential or exempt information is being considered).

**Contact Officer:** Matt Berry

HPE OS MEMBERSHIP		
Councillor John Walsh	Bolton;	
Councillor Dorothy Gunther	Bury;	
Councillor Mike Glover	Tameside;	
Councillor Barbara Brownridge	Oldham;	
Councillor Linda Robinson	Rochdale;	
Councillor Fred Walker	Wigan;	
Councillor Kevin Procter	Trafford;	
Councillor Amy Whyte	Trafford;	
Councillor Steve Gribbon	Stockport;	
Councillor Janet Mobbs	Stockport;	
Councillor Liam Billington	Tameside;	
Councillor Mandie Shilton Godwin	Manchester;	
Councillor Jon Connor Lyons	Manchester;	
Councillor Sharmina August	Salford;	

Councillor Martin Hayes	Bury;
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For copies of papers and further information on this meeting please refer to the website www.greatermanchester-ca.gov.uk.

Alternatively, contact the following Governance & Scrutiny Officer:



This agenda was issued Matt Berry on behalf of Julie Connor, Secretary to the Greater Manchester Combined Authority, Churchgate House, 56 Oxford Street, Manchester M1 6EU



# Housing Planning, Environment Overview & Scrutiny Committee 23<sup>rd</sup> September

**Declaration of Interests in Items appearing on the Agenda** 

NAME \_\_\_\_\_

	Minute Item No. / Agenda Item No.	Nature of Interest	Type of Interest
			Personal / Prejudicial /
			Disclosable Pecuniary
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	Personal / Prejudicial /
	Disclosable Pecuniary

## DRAFT GMCA HOUSING, PLANNING AND ENVIRONMENT OVERVIEW AND SCRUTINY COMMITTEE 11 JULY 2019 AT 18.00 AT THE GMCA OFFICES

**Present:** 

Bolton Councillor John Walsh (in the Chair)

Bury: Councillor Dorothy Gunther
Manchester: Councillor Jon Connor Lyons
Manchester: Councillor Mandie Shilton-Godwin
Oldham: Councillor Barbara Brownridge
Rochdale: Councillor Linda Robinson

Rochdale: Councillor Ray Dutton (substitute)

Stockport: Councillor Janet Mobbs
Tameside: Councillor Mike Glover
Tameside: Councillor Liam Billington
Wigan: Councillor Fred Walker

### Also In attendance

Julie Connor, Assistant Director, Governance and Scrutiny, GMCA

Joanne Heron, Statutory Scrutiny Officer, GMCA Matt Berry, Governance and Scrutiny Officer, GMCA Anne Morgan, Head of Planning Strategy, GMCA Steve Fyfe, Head of Housing Strategy, GMCA Kevin Lee, Director of Mayor's Office, GMCA

Steve Warrener, Finance and Corporate Services Director, TfGM

### M158/HPE APOLOGIES FOR ABSENCE

Apologies for absence were received from: Councillor Sharmina August (Salford), Councillor Amy Whyte (Trafford), Councillor Kevin Procter (Trafford), and Councillor Stephen Gribbin (Stockport).

### M159/HPE APPOINTMENT OF CHAIR 2019/20

That a Chair be appointed for this Committee for 2019/20.

### **RESOLVED/-**

Councillor John Walsh was appointed as Chair of this Committee for 2019/20.

### M160/HPE APPOINTMENT OF VICE CHAIR 2019/20

That a Vice Chair be appointed for this Committee for 2019/20.

### **RESOLVED/-**

Councillor Steven Gribbon was appointed as Vice Chair of this Committee for 2019/20.

### M161/HPE MEMBERSHIP FOR 2019/20

To detail those Members appointed to this Committee for 2019/20, and provide a guick reference point.

### **RESOLVED/-**

That the Membership of this Committee be noted.

### M162/HPE MEMBERS CODE OF CONDUCT

To remind Members of their obligations under the GMCA Members Code of Conduct.

### **RESOLVED/-**

That Members of this Committee note the Code of Conduct.

### M163/HPE ANNUAL DECLARATION OF INTEREST FORM

Members that are yet to complete an annual declaration of interest form were reminded to do so. It was stated that these to be collectively be published on the GMCA website.

### **RESOLVED/-**

That the item be noted.

### M164/HPE TERMS OF REFERENCE

To note the Committee's terms of reference.

### **RESOLVED/-**

That the Terms of Reference be circulated to Members of this Committee

### **ORDINARY BUSINESS**

### M165/HPE DECLARATIONS OF INTEREST

### **RESOLVED/-**

To note there were no declarations received.

### M166/HPE GREATER MANCHESTER STRATEGY IMPLEMENTATION PLAN AND PERFORMANCE UPDATE

Julie Connor, Assistant Director Governance & Scrutiny, GMCA introduced the item. It was stated that the 2 year Implementation Plan was agreed in April 2018, and outlines the targets and ambitions to be

achieved by the Combined Authority by 2020 with a RAG rating on progress. It was noted that this went to all 3 GM Scrutiny Committees with each asked each to focus on the areas they cover.

Anne Morgan Head of Planning Strategy and Steve Fyfe, Head of Housing Strategy, GMCA were introduced to the Committee to cover housing and planning strategy, Steve Warrener, Finance and Corporate Services Director TfGM to cover any transport queries. MARK Atherton, Assistant Director for Environment, GMCA to attend the next meeting of this Scrutiny to cover items relating to the GM Green Agenda.

A Member commented on Priority 5 – Connectivity, specifically asking around the dashboard supporting indicators that indicate that 55.3% of short journeys under 2km are made by walking or cycling in 2015-17. It was felt that this figure may be inaccurate as it was thought that there is a greater proportion who conduct this journey by car.

It was clarified that these numbers need to be checked with information provided on where/how they were sourced. This to then be fed back to this Scrutiny at a later date.

The question was also asked if work is underway to secure more funding for the Challenge fund with the understanding that the vast majority of the money first secured now being allocated.

It was clarified that the Made to Move strategy highlighted a figure of around £1.6 billion required to fund. TfGM have worked with districts to bring forward proposals and schemes thorough 5 tranches. All of the schemes across the GM districts have been reviewed to check accuracy and see if other funding methods are available. This can then identify schemes for the allocated £160 million and create a substitute list of other schemes that are ready and require funding. It was highlighted that GM is lobbying Government for funding via a few channels, such as via the Bee Network from the Walking Cycling Commissioner Chris Boardman, The Our Network vision and also likely though the Comprehensive Spending Review. It was stated that if Members wish, TfGM can bring more detailed updates on specifics at future meetings, with regular reporting going through to leaders of the Combined Authority bi-monthly.

A Member asked for clarity on the amber rating for Housing Provision with the specific question as to what does 'influencing infrastructure providers' actually means.

It was clarified that infrastructure had been a focus in GM over the last 12 months with concerted activity to deal with a range of challenging issues. This lead to the establishment of the Infrastructure Board which is attended by infrastructure providers, and offers an ability to work more closely with them on their investment programmes so these are aligned with plans for growth or areas where infrastructure is under pressure.

There are also plans to produce an infrastructure strategy/action plan which could lead to a different way of providing infrastructure and doing it in a more integrated way in areas where the most change is expected. It was noted that the Infrastructure framework highlights the challenges, with the next stage being how these are to be tackled.

A Member queried what the role of housing developers is, and what influence can be put on them to financially contribute to infrastructure.

It was stated that as part of the evidence base for the next phase of the GMSF, the GMCA are looking at strategic viability of developments. This is following planning guidance changing in 2018 to assess the plan so developers don't need to conduct viability assessments at planning application stage. If viability is demonstrated for sites, it is more challenging for developers to ask for contributions for roads, schools, health facilities etc. This work is to look primarily at brownfield land supply, with greenbelt land involving site specific viability work. It is hoped that an update on this work can be provided to this Scrutiny Committee around October time.

A Member queried industrial units being converted to housing without planning permission, and whether this is an issue that occurs in GM and something that requires wider awareness.

It was clarified that this issue had been present in Manchester with pressure put on to older office stock for conversion to residential. This can result in an Article 4 Direction being put in place to take permitted development rights away meaning that Planning Permission is required to proceed. It was noted that cases of this aren't currently widespread across GM, but that isolated cases are starting to emerge. There is concern in terms of the resulting standard of accommodation that is produced when this occurs. It was stated that there is not much that the Combined Authority can in response to it, as it's a local planning authority responsibility.

A Member queried EV charging infrastructure, specifically how this it is progressing following an initial delay, and how many charging points are being planned across the conurbation.

It was clarified that in terms of electric vehicle charging infrastructure, there is an existing number of electric charging points provided by the public sector, with further funding for 'newer generation' charging points having been bid for to add to existing stock. There is also currently a proposal of entering into contract with a preferred supplier around August to roll out an additional number of around 20-30 charging points.

A Member raised the issue of the requirement to retrofit homes in order to meet carbon reduction targets. It was highlighted that 27% of carbon emissions come from heating homes in the GM conurbation. The difficulty in tackling this issue was noted due to the fragmented nature of home ownership and tenants/occupiers. The opportunities provided by the required work to retrofit homes such as employment and upskilling was also highlighted.

It was noted that Mark Atherton is to attend the next meeting of this Scrutiny Committee to cover the green agenda and present a paper on retrofitting, these questions to be taken to the next meeting.

A Member highlighted the need for more quality housing to increase council revenue in their district of Rochdale. This issue had been highlighted to the City Mayor as the lead for Housing in GM. In terms of addressing homelessness, via homes allocation, this policy is being reviewed following council tax banding having been previously allocated incorrectly to some individuals.

### **RESOLVED**

- 1. That the report and overall progress towards the achievement of the GMS 2020 ambitions and targets be noted,
- 2. That the updated GMS Implementation Plan and Performance Dashboard be agreed.

That the comments of this Committee summarised above including requests for further information be taken in to account with future reports and included in the work programme as relevant.

### M167/HPE LOCAL CONCESSIONARY TRAVEL CHARGE

Steve Warrener, Finance and Corporate Services Director outlined a proposal to introduce an annual charge of £10 for 'older people' (those who qualify for English National Concessionary Scheme (ENCT) Pass) to access the local concessionary travel scheme which currently enables free travel on Metrolink and train within Greater Manchester.

Under the 2007 Act, eligible older and disabled people are entitled to free off-peak travel on all local bus (only) services anywhere in England from 9:30 until 23:30 on weekdays and all days at weekends and on Bank Holidays via the use of an ENCT pass. The Act stipulates that the travel permit for the ENCT pass must be issued free of charge. The only charge that TfGM is able to levy is to cover the cost of the replacement of lost, stolen or damaged passes. This currently stands at £10.

In addition to the national scheme ENCT, TfGM currently offer an enhanced scheme which offers free travel for older and disabled people:

- on Metrolink trams between 09:30 and midnight, Monday to Friday, and all day at weekends and on public holidays; and
- on trains on journeys scheduled to run at or after 09:30, Monday to Friday, and all day at weekends and on public holidays.

The report proposed that TfGM introduce a £10 charge per annum for older people for access to the enhanced local concessionary scheme. Should older people not wish to pay the £10 charge and opt out of the enhanced scheme they would still be entitled to free off-peak travel on all local bus services as outlined in the 2007 Act.

It was reported that to enable the continued use of the ENCTS cards in circulation, and therefore to implement the proposal at the lowest possible cost, TfGM would issue an 'entitlement product' that would be loaded on to a concessionaire's existing card once they have paid the £10 annual charge. It was highlighted that the proposal would align the charges for older people with the charges for other discretionary concessionary travel schemes in Greater Manchester.

This proposal is to be presented to the GMCA on 26<sup>th</sup> July for approval.

### Members provided the following questions and comments

 Members expressed concern that the charge may present financial difficulties to some individuals from accessing their travel pass, potentially creating a barrier to take-up. It was

- acknowledged that the sum of £10 will not be an issue for all, but there are those that may find covering this extra charge challenging.
- A Member stated that that the older generation have already made large contributions to tax and national insurance with transport highlighted as already being funded via council tax levy.
   This demographic had also been recently affected with other recent rising costs such as the removal of free TV licensing for over 75s.
- The point was made that there are reliability issues with public transport in GM, and asking for an additional payment for the current quality of service is a challenging message.
- A Member noted concern that any reduction in travel pass take-up could have detrimental
  health associated impacts. This includes restricting access to area based health care specialist
  centres and hospitals which was noted as being vital for some older people. Knock-on impacts
  of creating any barrier to take up of the travel pass could include Isolation leading to mental
  health problems.
- The point was made that this charge should be introduced with something 'positive' which may improve the reception and public perception of introducing the charge. Adding the specific benefits of what aspects of the GM bus service will be improved by introducing this was given as an example. The importance for making a case for the added value to those affected by the charge was stressed.
- A Member made the point that this charge could be offset by 'giving something back', such as lifting restrictions to free travel before 09:30.
- A Member asked around the administration cost for collecting the annual £10 fee which being a 12 month renewal rolling process could potentially have viability impacts on the return of that sum.
- A Member noted that GM should have an aspiration to promote mobility in all ages, with concern that introducing this charge is at odds with this message.
- Concern was expressed that some elderly individuals struggle with application processes, particularly with payments requiring bank details, requiring assistance with this process.
- It was noted that the report was deficient in terms of details of administration and methodology, making it challenging for Members to pass a considered opinion at this stage.
- A number of Members of this Committee wanted it stated on record that they were not in favour of implementing the Charge.

### The following was given in response to Members questions and comments:

- Following Member queries around the policy of concessionary travel being restricted nationally to post 09:30 as this is not adopted in London, it was clarified that this is national policy and that London has lifted the restriction as an 'enhancement' for their constituency.
- It was clarified that the £10 Charge is not associated with bus travel which is offered nationally free to those of pension age and irrespective of opting to pay the fee. The £10 charge is only for the additional 'enhancement' transport modes which GM offers above the national offer,

- namely the addition of concession access to train and tram transport, as such this will not hinder those individuals who rely on bus services to access health care.
- It was stated that funding raised from the scheme is to be ring-fenced towards investment to improve and enhance bus services and to protect concessions in GM via bus reform. This is forecast to be around an additional £1.2 million funding.
- In terms of providing details of some of the proposals upfront to reinvest the revenue from this scheme back in to bus reform, due to the nature of the consultation and budget sign off process, it is not possible to present proposals of this nature at this stage, but these would be presented to Members as part of the budget process in the future subject to sign-off of this proposal.
- In relation to concerns around elderly constituents finding the annual fee renewal challenging, It was stated that TfGM have undertaken an equality impact assessment to identify and address these issues. It was clarified that there is to be various means of paying the fee such a travel shops, or cheques.
- It was highlighted that take-up forecasts of the pass are difficult to predict for reasons such as, some individuals use the bus over tram and train anyway due to their geographical proximity.
- In relation to the question around offsetting the charge against allowing free concessionary travel before 09:30, this isn't something that had been considered
- It was clarified that the proposal is for passes to be renewed on a rolling basis, with the vast majority of estimated additional cost of the renewal process being absorbed into what TfGM are already doing with current pass renewal. The Charge is to be made in the same way as the young people persons IGO card. Although a cost-to-benefit calculation is not fully detailed, the cost is predicted to be marginal and the benefit is the £1.25 million based on 30% take up being the final figure with any administration cost already factored.
- It was clarified that TfGM can bring colleagues to future meetings of this Scrutiny to provide more operational detail of the scheme if necessary.

#### **RESOLVED:**

• That on the basis of the information in the report, the Committee do not support the current proposals to introduce a £10 per annum levy charge for older people for access to the enhanced local concessionary travel scheme and request that the comments outlined in the minutes are considered by the Combined Authority at their meeting on 26<sup>th</sup> July.

# For the remainder of this meeting, this Committee was inquorate with 9 Members present

#### M168/HPE HOUSING FUNDING STREAMS

Steve Fyfe, Head of Housing Strategy, GMCA delivered a presentation to the Committee summarising Government housing funding programmes: The slides were subsequently circulated to Committee Members, and are available on the GMCA website with the other papers for this meeting.

### Members provided the following comments and questions:

A Member enquired whether the Small Sites fund and Land Assembly Funds assist in building on land that is currently unused (such as Brownfield which could help assist district take-up quota) and clarity on the criteria for the application process.

It was clarified that this is the case, and that the Small Sites is grant funding which should assist in bringing forward smaller brownfield sites around GM. This funding can be applied for by council officers contacting Homes England with a final deadline of March 2021.

In terms of the 150 units in 40 sites, the question was asked if Members are entitled to know where these are located.

In response, it was confirmed that the schemes are approved by the Combined Authority, and that a list could be provided to Members of this Committee of the 40 sites.

A Member queried whether the GM Housing Investment Loan Fund is ring fenced for affordable schemes only in GM

It was clarified that this is not aimed at affordable schemes only, with the intention of the scheme to speed up housing delivery in general. The affordability housing element is determined by the district that the scheme is in. Each scheme needs to conform with or exceed the affordable home requirement of that local authority.

### **RESOLVED/-**

- 1. That the presentation be noted.
- 2. That the information in relation to sites be provided for the committee

### M169/HPE WORK PROGRAMME

Joanne Heron, Statutory Scrutiny Officer, Governance & Scrutiny Team, GMCA introduced the item. Following on from the informal briefing session of this Committee in June, the HPE Scrutiny Work Programme was drafted incorporating Member suggestions. Some of the timings of these items have subsequently changed since the initial draft was circulated to accommodate report availability

- Members to note that the Town Centre Strategy Mayoral Development Corporation item to be rescheduled from September to November
- Following Member comments the 'A Bed Every Night' item to be rearranged to be earlier in November 2019

### **RESOLVED/-**

That with the above changes, the Work Programme be noted

### M170/HPE DATES OF FUTURE MEETINGS

### RESOLVED/-

Future meeting arrangements agreed as follows

Thursday 12th September	18:00 - 20:00
Thursday 10th October	14:00 - 16:00
Thursday 14th November	18:00 - 20:00
Thursday 5th December	18:00 - 20:00
Thursday 16th January 2020	10:30 - 11:30
Thursday 13th February 2020	14:00 - 16:00
Thursday 19th March 2020	18:00 - 20:00





### Housing, Planning & Environment Overview and Scrutiny Committee

Date: 23 September 2019

Subject: Bus Reform Consultation Report

Report of: Liz Treacy, GMCA Solicitor and Monitoring Officer

### **PURPOSE OF REPORT**

On 28 June 2019, the GMCA agreed to instruct an auditor to review the assessment of a proposed franchising scheme prepared by TfGM. Subject to the outcome of that audit, the GMCA will consider the contents of that audit report and will decide whether it wishes to proceed to consultation.

This report provides an overview of how a consultation on a proposed franchising scheme for Greater Manchester would be conducted if GMCA decides it wishes to consult on the scheme.

### **RECOMMENDATIONS:**

The Committee is requested to note and comment on the proposed approach to consultation outlined in the report including communications, engagement and budget.

### **CONTACT OFFICERS:**

Liz Treacy GMCA Solicitor and Liz.Treacy@greatermanchester-

Monitoring Officer <u>ca.gov.uk</u>

Kate Brown

Director of Corporate Affairs,

Kate.Brown@tfgm.com

TfGM

Number of attachments included in the report:

o 2018 Bus Consultation Channel Plan

### **BACKGROUND PAPERS:**

The following is a list of the background papers on which this report is based in accordance with the requirements of Section 100D (1) of the Local Government Act 1972. It does not include documents, which would disclose exempt or confidential information as identified by that Act.

- Report to Planning, Housing and Environment Overview and Scrutiny Committee, 17 April 2018
   <a href="https://www.gmcameetings.co.uk/download/meetings/id/3141/item 6 greater manches ter bus services update">https://www.gmcameetings.co.uk/download/meetings/id/3141/item 6 greater manches ter bus services update</a>
- Report to GMCA, 27 July 2018
   <a href="https://www.gmcameetings.co.uk/download/meetings/id/3519/19">https://www.gmcameetings.co.uk/download/meetings/id/3519/19</a> bus reform
- Report to Planning, Housing and Environment Overview and Scrutiny Committee, 15
   November 2018

   <a href="https://www.gmcameetings.co.uk/download/meetings/id/3881/05">https://www.gmcameetings.co.uk/download/meetings/id/3881/05</a> bus reform update
- Report to GMCA, 28 June 2019
   https://www.gmcameetings.co.uk/download/meetings/id/4752/13 bus reform

### 1 INTRODUCTION AND BACKGROUND

- 1.1 As members will be aware the Bus Services Act 2017, which was one of the outcomes of the 2014 Devolution Agreement with Government, came into effect in June 2017 ("the Act"). The Act gives mayoral combined authorities, such as the Greater Manchester Combined Authority ("GMCA") new powers to reform their local bus market.
- 1.2 The Act sets out a number of steps that must be undertaken by an authority before a decision can be made as to whether or not to introduce any proposed bus franchising scheme. In summary, key stages prior to any decision-making include preparing an assessment, the auditing of the assessment, and undertaking a public consultation.
- 1.3 Previous reports to Scrutiny Members have provided an introduction to the Act (April 2018) and subsequent reports have given updates on the progress in Greater Manchester utilising the provisions of the Act, notably the assessment process (November 2018) and the Transport Delivery Plan in February 2019.
- 1.4 Members requested that they be kept updated with progress and noted that they would be keen to understand and comment on any potential consultation phase.

### 2 PROGRESS TO DATE

- 2.1 In accordance with the Act, and following instruction from the GMCA on 30 June 2017, an assessment of a proposed bus franchising scheme has been prepared. The assessment relates to the entire Greater Manchester area and is informed by the Vision for Bus as set out in the agreed Greater Manchester 2040 Transport Strategy.
- 2.2 In line with the Act, the assessment describes the effects that the proposed franchising scheme is likely to produce and compares making the proposed scheme to one or more other options for reform, such as partnerships.
- 2.3 On 28 June 2019 and upon completion of the assessment, the GMCA decided to proceed with the proposed scheme by agreeing to instruct an independent auditor to prepare a report in accordance with section 123D of the Act.
- 2.4 The Act states that the purpose of the audit report is to ensure that the assessment and any subsequent consultation is based on appropriate material which has been analysed effectively.

- 2.5 Unlike a traditional audit, this report is not an inspection of accounts. In the guidance issued under section 123B of the Act ("the Guidance"), it is referred to as an assurance report instead of an audit.
- 2.6 The Act specifies that the report must be prepared by a body with a recognised professional accountancy qualification and without any conflict of interests with the authority. To ensure that the report is completely independent, the Guidance makes it clear that the auditor cannot have been engaged to assist with any aspect of the assessment.
- 2.7 Subject to the outcome of that report, the next step would be for the GMCA to undertake a consultation in accordance with section 123E of the Act. This report sets out the approach to how a consultation on the proposed franchising scheme for Greater Manchester would be conducted if GMCA decides it wishes to consult on the scheme.

### 3 GREATER MANCHESTER'S CONSULTATION APPROACH

- 3.1 The purpose of the consultation would be to allow stakeholders to provide their views on whether the proposed franchising scheme should be made, with or without modification. Further details regarding the scope of the consultation are set out in section 6.
- 3.2 It is envisaged that TfGM would be instructed to deliver the consultation on behalf of the GMCA. The GMCA Solicitor and Monitoring Officer would be the lead officer, supported by GMCA and TfGM's consultations and communications teams.
- 3.3 The consultation approach set out in this report is being prepared to meet the requirements of the Act, and the Guidance. Independent quality assurance is being sought from the Consultation Institute.
- 3.4 In addition, <u>Ipsos MORI</u> an opinion research agency has been appointed to provide consultation response management and analysis. Ipsos MORI has extensive experience in supporting high profile consultations across a number of areas, including:
  - Response collection and analysis;
  - Deliberative research; and
  - Ensuring consultation questions are fit for purpose and unbiased.

- 3.5 The consultation approach has been developed in accordance with the GMCA's established practice for consultations, in particular:
  - Taking into consideration existing consultation best practice and working in parallel to national guidance, and other common law and statutory requirements including the Equality Act;
  - Ensuring documents are accessible to all consultees, including the provision of printed consultation materials in public buildings, and that all documentation is published online;
  - Providing appropriate response mechanisms that facilitate both digital and nondigital consultation responses; and
  - Ensuring that the consultation is inclusive to Greater Manchester's diverse population, accessible to audiences with protected characteristics, and offers opportunities to directly engage with the process in each of the ten local authority areas, supported by an Equality Impact Assessment.

### 4 STATUTORY FRAMEWORK GOVERNING CONSULTATION APPROACH

- 4.1 There are a number of legal requirements and principles which would apply to a consultation on a proposed franchising scheme, including the consultation document and related materials, as well as who to consult.
- 4.2 The Act states that if undertaking a consultation, the GMCA must:
  - Publish a consultation document relating to the proposed scheme;
  - Publish the assessment of the proposed scheme;
  - Publish the auditor's report on the assessment; and
  - Give notice of the proposed scheme in such manner as the GMCA considers appropriate for bringing it to the attention of the persons in the area to which it relates.

- 4.3 Section 123F states what must be included in the consultation document. To summarise this includes, but is not limited to:
  - A description of the area to which the proposed scheme relates;
  - A description of the local services that are proposed to be provided under local service contracts (i.e. franchised) and a description of the local services which are proposed to be excluded from the scheme;
  - The date on which the scheme is proposed to be made and the date or dates by which it is proposed that local service contracts (i.e. franchise contracts) may first be entered into;
  - The date by which responses to the consultation must be received; and
  - A summary of the assessment.
- 4.4 The Act does not prescribe the questions to be asked as part of the consultation. As the GMCA would be the first Combined Authority to undertake a consultation on a proposed franchising scheme, there is no existing precedent. Legal advice is being sought on the development of questions to meet the consultation requirements and outcomes of the Act.
- 4.5 In terms of who must be consulted, section 123E(4) of the Act lists various definable categories of persons (who together are known as "statutory consultees"). In summary, these include:
  - All bus operators running local services in Greater Manchester;
  - All other persons holding a PSV operator's licence or community bus permit who would be affected by the proposed scheme;
  - Such persons who appear to represent employees of bus operators running local services in Greater Manchester;
  - Such organisations appearing to represent bus passengers;
  - A traffic commissioner (which in this case is proposed to be the traffic commissioner for the North West);
  - The Chief Constable of Greater Manchester Police;
  - The Passengers' Council (which is now known as Transport Focus);
  - The Competition and Markets Authority; and

- Any other relevant local authority whose area would be affected by the proposed scheme. This includes the 10 GM authorities and other neighbouring authorities.
- 4.6 The Guidance makes it clear that in undertaking a consultation, an authority should "consult widely on their proposals". This means that the consultation should also be aimed at, and accessible to, the general public including both bus users and non-users, businesses including bus operators, elected representatives and other interested parties.
- 4.7 In the event that the GMCA decides to undertake a consultation it will also have to have due consideration to the public law principles which set out how:
  - Consultations should occur when proposals are at a formative stage;
  - Consultations should give sufficient reasons for any proposal to permit intelligent consideration;
  - Consultations should allow adequate time for consideration and response; and
  - The product of consultation must be conscientiously taken into account.
- 4.8 These principles are relevant for this consultation because the nature of the proposals mean there will be a significant impact on a wide range of stakeholders, such as bus operators, passengers and the general public alike.

### 5 BEST PRACTICE GUIDANCE

- The Consultation Institute has been engaged to test the bus reform consultation approach and content against best practice requirements. If the requirements are met, this would conclude in a letter confirming that best or good practice has been achieved at the end of the quality assurance process. Although each quality assurance process is bespoke to the scope of a consultation, the achievement of best practice accreditation is measured by meeting the following broad principles:
  - Meaningful consultation and transparent governance;
  - Identification of under-reached groups that might require special targeting;
  - Comprehensive project plan that is consistent with consultation scope;
  - Satisfactory audit trail;
  - Accessible, accurate consultation documentation with appropriate detail, and accessible response channels;

- Close monitoring of consultation performance and implementation of Project Plan;
- Thorough, unbiased analysis of the consultation and effective communication of consultee views to decision-makers;
- Publication of consultation feedback and consultor response; and
- Abiding by the relevant legal principles to consultations.
- Quality assurance is iterative and features ongoing review of content and process by the Consultation Institute throughout the planning, delivery and close stages. The process also includes the following key intervention stages:
  - Scoping and governance;
  - Project planning;
  - Documentation and review and consultation charter adherence;
  - Mid-consultation review;
  - Closing date review; and
  - Final report.

### 6 CONSULTATION SCOPE

- 6.1 It is a best practice requirement to clearly articulate the scope of the consultation and to disclose to consultees what their views can and cannot influence.
- 6.2 The requirement of the Act is to consult on the proposed franchising scheme for Greater Manchester, which would replace the current deregulated model to a model where most services are specified by and operated under contract to the GMCA.
- 6.3 This means that the consultation scope would be about changing the way the bus market operates in Greater Manchester from a deregulated to a franchised model. It is important to note that the consultation is not about current bus services or performance, fares, ticketing or any other matters of bus policy. All consultation documentation and materials will ensure that the scope of the consultation, and what is out of scope, is clearly articulated.

### 7 CONSULTATION RESPONSES

- 7.1 It is proposed that consultation responses will be accepted through the following channels, directing all responses to Ipsos MORI who will be instructed to manage and analyse the responses:
  - Online response form;
  - Hard copy questionnaire, which can be returned to a freepost address;
  - · Email to a dedicated consultation email address; and
  - Writing to a freepost address.
- 7.2 Only responses submitted through these channels will form part of the consultation analysis. Responses received by the GMCA, TfGM or districts during the consultation period would be redirected through the formal channels. Statutory consultees and stakeholders will be made aware of the formal response channels, which will also enable the redirection of any consultation responses they receive to the formal channels.
- 7.3 The option of responding via email or letter provides a more accessible route for those who do not wish to provide responses to the consultation questions in detail.
- 7.4 As noted in paragraph 3.4, Ipsos MORI has been appointed to provide consultation response management and analysis throughout the consultation period.
- 7.5 During the consultation period, out of scope feedback, or those requiring a response, will be filtered and issued to GMCA and TfGM for separate review. These out of scope responses including responses solely focussed on current services, fares and ticketing would be managed by the relevant teams for review and response.
- 7.6 At the consultation close stage, Ipsos MORI will develop a consultation feedback analysis report that will be used to inform and published alongside the GMCA's report on its response to the consultation. Feedback and responses within the scope of the consultation would be appraised in the report as formal analysis, with a summary of out of scope key themes to be included as a separate summary.

### 8 CONSULTATION DELIVERY

- 8.1 This consultation will be the first consultation of this kind run in Greater Manchester and indeed the UK, as Greater Manchester is the first city-region to use the powers available under the Act.
- 8.2 The strategic approach to the delivery of the consultation would be to raise awareness of the proposed franchising scheme and the consultation through a combination of free, paid and earned channels, in order to ensure the maximum reach across all target audiences and consultees.
- 8.3 As outlined in section 4, the Act specifies the statutory consultees. In addition to these, the consultation would also be aimed at, and accessible to, the general public, businesses, elected representatives and other interested parties. In the approach to consultation delivery, consultees have been divided into statutory and non-statutory consultees and segmented further to ensure improved targeting.

### **Statutory Consultees**

- 8.4 At the launch of the consultation, arrangements would be made for all statutory consultees to receive an information pack providing details of the consultation, where to seek further information and opportunities to ask questions or seek clarification.
- 8.5 In recognition of the impact that the proposed franchising scheme could have on bus operators, this group of statutory consultees would also be invited to a meeting in the early days of the consultation to clarify any issues or questions they may have.
- 8.6 Response rates from statutory consultees will be monitored throughout the consultation period so that further reminders can be sent out about the consultation deadline.

### **Local Passengers and Public**

- 8.7 Local passengers and the general public includes residents of Greater Manchester and residents of the neighbouring local authorities.
- 8.8 The total population of Greater Manchester is 2.8m and it is estimated that the wider population travelling to work within Greater Manchester is a further 230,000 people.
  - Age: 20% of the population are under 15; 6% are 15-19; 14% are 20-29; 27% are 30-49; 27% are 50-74 and 7% are over 75
  - Ethnic background: 16% of the Greater Manchester population are BAME with a higher proportion of this community in Manchester, Bolton and Oldham (main groups are Asian British including Indian, Pakistani and Bangladeshi and Black/African/Caribbean)

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- 19% of the Greater Manchester population have a disability (largest groups are people with mobility or walking difficulty and long-standing illnesses/health issues)
- 35% of 65-74 year olds and 47% of over 75 year olds do not have digital access
- 8.9 A variety of owned, paid and earned channels will be used to raise awareness of the proposed franchising scheme and the consultation amongst the general public and local passengers; to provide them with the opportunity to comment and ensure that they receive the correct information.
- 8.10 Free channels, such as GMCA, TfGM, Council and wider public sector social media channels, websites, newsletters, magazines, and databases will be used to target engaged audiences and the general public. Paid channels including outdoor, digital, radio, print and social media advertising will also be used to increase reach and penetration and to cover areas and audiences not reached by free channels; whilst earned channels including media engagement and community engagement will be used to increase reach and target specific communities and audiences. Those who do not have digital access will be targeted through outdoor advertising, print advertising, print editorial, public information events and community engagement.
- 8.11 Public information events will be held at various locations across Greater Manchester, focusing on venues the general public visit during their leisure time, such as shopping centres. Holding events at locations where there is high footfall and where people have time to engage has proved most effective during previous consultations. These events will provide information about the consultation; however, consultation responses would not be sought from this route. At least two public information events in different locations in each of the ten Greater Manchester Council areas will be arranged.
- 8.12 In addition to GM wide activity, communications and engagement activity will be also be weighted to reflect the specific characteristics and requirements for each GM council area to reflect their demographics. This will be complemented with non-paid stakeholder and community engagement and outreach work to ensure the views of those less likely to participate in the consultation are encouraged as part of the consultation.
- 8.13 Third Sector organisations and representative organisations such as GMCVO have agreed to promote the consultation through their network of community, voluntary and social enterprises in the ten Greater Manchester council areas.
- 8.14 In addition to this, advice on engagement will be sought from groups representing people with protected characteristics, including: the GM BME Network, the Pakistani Resource Centre Manchester, Caribbean and African Health Network and Breakthrough UK. An equality impact assessment (EIA) has also been completed.
- 8.15 Representative GM bodies will be contacted at the launch of the consultation and provided with relevant information and materials to directly target their networks, extending reach

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into relevant communities through the most impactful channels. This activity will be replicated through district channels where available/appropriate, harnessing existing experience of direct community engagement at a local level.

8.16 A more detailed list of audiences and channels can be found in the appendix.

### **Business**

- 8.17 It is recognised that Greater Manchester businesses and their representatives may wish to respond to the consultation. Bespoke communications and engagement arrangements for GM businesses have therefore been developed to raise awareness of the consultation. This includes targeted communication through representative bodies e.g. Chamber of Commerce and large employers.
- 8.18 Business media will be targeted to help raise awareness of the consultation, particularly relating to key GM market sectors such as: business, finance, professional services, health and social care.

### **Councillors and MPs**

8.19 The ten Greater Manchester Councils are statutory consultees. It is recognised that Councillors and MPs may also wish to respond to the consultation individually or on behalf of residents and that as elected representatives, they may wish to raise awareness of and promote participation in the consultation.

### Other interest groups

- 8.20 Campaign and interest groups relating to transport, community/place, the environment, education, health and the third sector will be contacted by email or letter at a Greater Manchester, regional and national level.
- 8.21 Stakeholders within all these groups will be asked to share details of the consultation within their networks. Digital and printed copies of information packs will be available to interested stakeholders.
- 8.22 Social and trade media will also be used to reach campaign and interest groups.

### **Budget**

8.23 On 15 February 2019 the GMCA's transport budget for 2019/20 was approved, part of which included bus reform and the budget for consultation. At the time this was approved subject to the GMCA having then followed the correct procedure in the Act in completing the assessment and obtaining an audit report.

- 8.24 Should the GMCA decide to undertake a consultation then the total costs are estimated to be £660k. These cost projections include all costs to deliver a consultation that fulfils the requirements of the Act and Guidance, including:
  - £150k for response management/analysis by third party supplier;
  - £130k for consultation best practice support and expertise including The Consultation Institute;
  - £100k for deliberative research to support the open survey responses;
  - £100k for design, production and print of materials, including core consultation documentation and assets to support the awareness-raising activity; and
  - £180k communications and engagement activity to ensure reach and awareness across the public, businesses, and other interested parties in GM and beyond. This is in addition to activity on existing GM free channels.

### **Monitoring**

- 8.25 A range of areas will be actively monitored and reviewed throughout the consultation period to evaluate participation and reach, effectiveness of activity, as well as assessing any need to modify the approach throughout the consultation period:
  - Consultation responses;
    - Overall consultation response rate and analysis of responses received against identified consultee audiences
    - Spatial monitoring of responses at a district level
  - Engagement/impact;
    - Levels of engagement with identified stakeholders, and participation in meetings/ events
    - Download of documents
    - Tracking of website traffic, including video views and social media analysis
  - Visibility and reach; and
    - Monitoring of paid media reach
    - Use of free and owned channels, including district-owned channels to reach local groups and communities

- Consultation process and content.
  - Amendments to published materials
  - Correction of factual inaccuracies to specific issues
  - Criticism of consultation process

### 9 OUTCOMES AND MEASURES OF SUCCESS

- 9.1 Given the technical nature of a consultation on a proposed franchising scheme which is the first to be undertaken under the Act, it is difficult to accurately project the number of responses that may be received from consultees.
- 9.2 The Consultation Institute has advised that appropriate measures of success should include whether, on the balance of probabilities, the consultation has fulfilled its mandate satisfactorily. As part of the accreditation process, the Consultation Institute would therefore take into account the quality of the views expressed, as well as the number of responses, the richness of data assembled and the rigour with which the GMCA at that point has sought to understand and respond to those views.
- 9.3 To support the number of formal responses which would be received, a deliberative research activity would be commissioned from Ipsos MORI to discuss the consultation with various focus groups. These focus groups would take place during the formal consultation period, with public transport users, non-users, residents and local businesses to accurately reflect a cross-section of the GM population.
- 9.4 The results would provide further analysis of the views of the wider GM population and be reported and analysed as part of the report on the consultation.
- 9.5 Reach and impact would be monitored throughout the consultation period to ensure a reasonable level of visibility for all those who have a justifiable right to participate in the consultation. This would be reviewed spatially across GM at a district level and into neighbouring areas, particularly where there is a high penetration of cross-boundary bus services.

### 10 NEXT STEPS AND PROCESS TO MAYORAL DECISION

- 10.1 Subject to the outcome of the audit and any decision of the GMCA, it is proposed that the consultation would launch in early October 2019 and close in late December 2019. The Act states that upon completion of the consultation, the GMCA is required to publish a report setting out its response to the consultation.
- 10.2 To assist with the above it is proposed that such a report detailing the outcome and response to the consultation will be submitted to this committee in due course and prior to any meeting of the GMCA, so as to allow this committee to review the GMCA's proposed response to the consultation.

### 11 FURTHER UPDATES TO MEMBERS

11.1 Members should note that further updates will be provided to the Scrutiny Committee as appropriate.

### 12 RECOMMENDATIONS

12.1 Recommendations are set out on the front page of this report.

### **APPENDIX: BUS CONSULTATION CHANNEL PLAN**

The below channel plan is an indicative plan of the free, earned and paid channels to be used for the potential Bus Consultation

CHANNEL	DETAIL	COST/ VALUE	REACH
RADIO		TALOL	
RADIO  Radio ads on commercial radio - Capital Radio & Smooth Radio	Airtime for 6 weeks 17,123,000 impressions  Capital coverage includes Chester, Liverpool, Warrington, Blackpool, Burnley and Blackburn  Smooth coverage includes Greater Manchester, Warrington, and Macclesfield	£33,000	Main audience for Capital: 15-44 Reach:426,000  Main audience for Smooth: 45-54 Reach: 925,000  Total impressions: 17,123,000 impressions
BBC Radio Manchester	Targeted through media engagement activity	N/A	Main audience: 50-69 Reach: 170,000
Media engagement with other commercial radio stations – Hits Radio; Revolution; Tower FM; Tameside Radio; Trafford Sounds; Wish FM	Targeted through media engagement activity	N/A	Main audiences: 25-44 Total Reach: 462,000
SOCIAL			
Facebook Ads	Ads aimed in 30km radius of GM	£17,000	Main audiences: 15-29 Reach: 920,900
Twitter Ads	Ads aimed at Manchester & Liverpool regions	£2,000	Main audiences: 16-24 Reach: TBC
TFGM & GMCA Owned channels (inc GM Fire)	Posts across Twitter, Facebook, LinkedIn and Instagram	N/A	Main audiences:30 -74 Combined Reach: 214,000
District & Health Partner Owned channels	Posts across all 10 districts & all partner organisations social media feeds	N/A	Main audiences: 30-74 Combined Reach: Over 1m
Stakeholder channels	Targeted with digital toolkit at launch of consultation.	N/A	Will help to ensure reach into specific sectors and communities – eg GM Chamber of Commerce will share with 27,000 followers on social channels

PRESS			
PRESS  Partnership with Reach PLC (covering MEN Thurs/Fri, MEN Sun, Manchester Weekly News, Rochdale Observer Sat, Heywood Advertiser, Middleton Guardian, Stockport Express, Macclesfield Express, Rossendale Free Press, Accrington	Four 25 x 4 press adverts in each title One full page advertorial in each title Branded content in: MEN, LancsLive, CheshireLive Programmatic Digital adverts Newsjacking Digital Skins Branded Facebook & Instagram posts	£35k	Main audiences: 55+ Reach: 5,771,544
Observer, Metro North West)  Print advertising across other GM & cross boundary titles (including Bolton News, Wigan Observer & Evening Post, Oldham Times & Tameside & Oldham Reporter	One 20 x 3 press advert in each title	£2600	Main audiences: 55+ Readership:216,375
Group, Bury Times, and The Messenger, Burnley Express, Lancashire Evening Post, Leigh Journal, Liverpool Echo) Manchester Evening News - media engagement activity	Press releases, feature articles and op-eds in MEN,	Free	Main audiences: 55+ Reach: 46,000
Local and regional media engagement activity – in GM	Press releases, feature articles and op-eds in other GM & cross boundary press Bolton News (9.7k); Bolton Independent; Bury Times (7.5k); Radcliffe Times; Oldham Evening Chronicle; Oldham Times (5k); Rochdale Observer Rochdale Online; Salford Star Salford Mail; Stockport Mail Stockport Express (84k) Stockport Independent; Tameside Reporter; Messenger Newspaper (700); Wigan Evening Post/Wigan Observer (2.3k)	Free	Main audiences: varies by title by generally 55+ Reach: As per title
Local and regional media engagement	Lancashire Telegraph/Blackburn News	Free	Main audience: varies by title but generally 55+

and in the second	(12k), Lamanahira		
activity – with cross	(12k); Lancashire		
boundary media	Telegraph/Blackburn News		
	(12k); Chester/Crewe		
	Chronicle; Yorkshire Post		
	(22k) Derby Telegraph (18k)		
	Derbyshire Times (20k);		
	Glossop Chronicle;		
	Lancashire Telegraph (20k)		
	Lancs Live Lancashire		
	Business View Business		
	Lancashire; Liverpool Echo		
	(52k); Warrington Guardian		
	(2k) South Warrington News		
Media engagement	Asian Leader (30k); Asian	Free	Various audiences specific
with sectoral press	Express (42k); Jewish		to protected characteristics
representing protected	Chronicle (156k); Disability		Reach: as per title
characteristics: race	Review (1m); Able Now		
	(150k)		
OUTDOOR/OOH	1 7		
Large Format Digital	The Hub – NQ/Ancoats; Axis;	£8,600	Main audience:
screens	National Football Museum	20,000	commuters/city centre
36166113	National Football Wascum		workers
Static Billboards	40, 00, 0, 0, about hillboards at	610.000	
Static Biliboards	48, 96 & 6 sheet billboards at	£19,000	Main audience: commuters;
	sites across Greater		public transport users
	Manchester		
			Impressions – 8,688,000
Local Authority Digital	Manchester City	Free	Main audience: commuters;
sites	Council The Loop digital		public transport users
	network (40		
	screens), and Mancunian		
	Way screen		
	<b>'</b>		
Local Authority Print	A4/A3 poster distribution &	Free	Main audience: 55+ and
distribution network	leaflets at 450 locations		those who don't have digital
distribution network	across Greater Manchester		access
			access
	including libraries,		
	community centres, town		
	halls		
		_	
Public information	Public information events in	Free	Aimed at all audiences
events in each district	each of 10 GM districts in		
	areas of high footfall		
	Drop-in events in each		
	district		
DIGITAL & ONLINE			
Google Search	For people searching	£5,000	
	organically for bus-related		
	info. This will enable		
	gmconsult.org site to come		
	higher in the rankings		
	mgner in the rankings		

Website adverts	MEN Online - Clickable Skins & mobile MPUs MEN Online - Branded Content – Mobile, Tablet, Desktop MIQ ads - target relevant audiences based on their internet behaviours and browser searches (i.e. google search history and browsing history).	Included in Reach package	Main audience:  Impressions – 250,000 Estimated clicks – 2,500  Impressions – 5,714,286
Geotargeting website adverts	Targets using real-time location targeting: commuter hotspots, student areas and buildings, using custom locations & re-assessing users when they are likely to have more time to interact with ads such as home/work	£20,500	Main audience: commuters across GM & cross boundary Impressions – 878,136
Free bus and Metrolink Wi-Fi landing page	Landing page for passengers signing onto the free Wi-Fi	Free	Main audience: commuters across GM
Website advert on tfgm.com website	Advert across website pages	Free	Impressions – 9,276,653 Reach – 6,827,243
TRANSPORT			
Adverts on Bus Sides/Rears	Greater Manchester wide	£6,500	Reach: 3,184,000
Posters & Vinyls at Bus Shelter & Interchanges	275 sites across Greater Manchester	Free	Reach: 47,250,000
Free Bus Wrap & Digital Screens	Two buses – in city centre; one in Bolton Window vinyls at appropriate stations/interchanges, i.e. Bolton/Shudehill	Free	Reach: 9,759,150 Reach: 1,692
Visual Messaging	56 sites across Greater	Free	56 sites across GM
Signs on roadsides  Metrolink Posters  A1 Posters & 6 Sheet Posters	Manchester A1 Posters & 6 Sheet Posters at 61 sites across the network  48 sheet posters at 2 sites at Bury Metrolink stop	Free	Impressions – 23,629,928  Reach – 10,306,958

	Tram coving posters at 250 sites across the network PIDs		
Get me there phone app screen advert	Advert will appear for all users of the get me there app	Free	
NEWSLETTERS & DATABASES			
Email databases for Travel Pass holders	Database of customers eligible for concessionary pass (458,207); Igo (71,351); Get Me There (76,794)	Free	Reach: As per database opposite
Stakeholder Newsletters	External stakeholder newsletters from Metrolink (54,530); TFGM (300); GMCA (1,000); Districts (681,000)	Free	Reach: As per newsletter opposite
Partner Databases	Targeted at launch of consultation	Free	Will help to ensure reach into specific communities – eg Afro-Caribbean Network will send to 800 member database

## Agenda Item 6



# HOUSING PLANNING AND ENVIRONMENT OVERVIEW AND SCRUTINY COMMITTEE

Date: Monday 23<sup>rd</sup> September 2018

Subject: DECARBONISING GREATER MANCHESTER'S EXISTING BUILDINGS

Report of: Mark Atherton, Asst. Director, GM Environment Team

#### **PURPOSE OF REPORT**

To present a draft report, produced for Greater Manchester by the GMCA and an expert working group, with their recommendations for decarbonising Greater Manchester's existing building stock (retrofit report). The Decarbonising GM's Buildings report forms one of the key deliverables from the Greater Manchester Green Summit and aims to support GM's achievement of the Green Summit aspiration for the City Region to be carbon neutral by 2038.

The key recommendations from the Decarbonising GM's Buildings report have been incorporated into GM's 5 Year Environment Plan, published and adopted by GMCA in March 2019. The purpose of the Decarbonising GM's Buildings report (see Annex 02) is to add further detail and justification for the actions proposed in the 5 Year Environment Plan.

#### **RECOMMENDATIONS**

To note and comment upon the contents of the report, which will be put to the meeting of the Greater Manchester Combined Authority on 27<sup>th</sup> September for approval.

#### **CONTACT OFFICERS**

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#### 1. Background

- 1.1. The Green Summit, held in March 2018, set out Greater Manchester's aspiration to be carbon neutral by 2038, meeting the challenge of climate change and supporting the transition to a low carbon economy. One of the key issues identified is the reduction of carbon emissions produced from the excessive use of energy from GM's buildings. The Decarbonising GM's Buildings report sets out where GM is now and where it needs to get to in terms of the energy demand of Greater Manchester's existing domestic, commercial and public buildings. Based on that, it provides a set of recommendations for taking action.
- 1.2. In producing the Decarbonising GM's Buildings report, advice and guidance has been provided by a range of regional and national stakeholders including UK Green Building Council, Carbon Coop, Building Research Establishment, the University of Salford, Skanska, Red Coop and others.
- 1.3. The Decarbonising GM's Buildings report contents and conclusions were also tested with a wide number of key partners, through a number of working groups and consultation workshops. These workshops were held in early 2019 and their early conclusions and recommendations were used to inform the development of the GM 5 Year Environment Plan, prior to its launch at the 2019 Green Summit and endorsement by GMCA in March 2019.
- 1.4. Investing in reducing the energy used in Greater Manchester's buildings offers a significant opportunity that would bring with it multiple benefits, not just for the city-region's environmental ambitions. For Greater Manchester's residents, homes that are warmer, more comfortable and have good ventilation are healthier homes, improving people's physical and mental health. They are also cheaper to heat, meaning Greater Manchester residents and businesses would spend less on their fuel bills and be more resilient to future energy price rises. For Greater Manchester's economy, a healthier population means increased productivity and less public spending on healthcare. Businesses that use their energy more efficiently are more resilient to energy price volatility. Investing in Greater Manchester's building stock also presents an opportunity for growth in jobs and skills in the construction and associated sectors in the city-region.

#### 2. Reducing Energy Demand In Homes

2.1 In Greater Manchester's homes, continued effort is needed to ramp up actions to help reduce the energy demands for those residents in or at risk of falling into fuel poverty, continuing to maximise the use of national funding streams (particularly Energy Company Obligation – ECO – funding) by using local flexibilities, whilst making the case for greater local

influence so that this funding better aligns with Greater Manchester's ambitions. This funding does not currently provide for the extent and depth of improvements needed in homes to meet Greater Manchester's environmental and wider ambitions (Recommendation 1).

- 2.2 At the same time, GM needs to scale up deeper retrofit of homes across Greater Manchester. This presents significant opportunities to realise the benefits set out above for improving people's health and increasing wealth. To realise the scale of reduction in CO<sub>2</sub> emissions GM needs from reducing buildings' demand for energy, GM needs tens of thousands of deeper retrofits every year. At present, deeper retrofit projects are of the scale of pilots of 10s or at most 100-200 homes or are not retrofitting to the depth needed.
- 2.3 There are barriers which prevent scaling up what has been achieved in these projects and which would need to be overcome to realise domestic retrofit to the extent and depth required. These barriers include:
  - The need to adopt a whole-property (or whole-house) approach to retrofit, understanding what level of reduction in demand (in particular for heating) and CO<sub>2</sub> emissions can be achieved across Greater Manchester's different types of properties (Recommendation 2). At the same time, a whole-house approach needs to be embedded to make sure that retrofit measures are always carried out as part of an overall plan for that property to avoid piecemeal change or unintended consequences.
  - The need to develop attractive financial offers for homeowners and financial models
    for investors (in the public and private sectors) to overcome the high up-front capital
    costs of deeper retrofit (Recommendation 3). Patient finance, such as green
    mortgages, equity loans and other forms of loan funding (e.g. revolving loan fund),
    needs to be available at scale to overcome this barrier.
  - The need to develop both the capability (upskilling) and capacity of the supply chain required to deliver deeper retrofit. The supply chain for retrofit will not develop without first seeing, real, evidenced demand emerge, meaning that the supply chain and the stimulation of demand needs to take place in tandem. In particular, the issue of a shortage of a sufficiently large skilled workforce to deliver on this scale needs to be tackled across providers, learning and skills support agencies and trade bodies (Recommendation 4).
  - The need to develop delivery models that build awareness of whole-house deeper retrofit, target those people most likely to be early adopters of it, build trust in delivery and the supply chain and coordinate a smooth customer journey through the process (Recommendation 5).

2.4 Tackling these challenges in a way that then enables the retrofit of domestic properties at the required scale and depth will require innovative approaches to delivery in partnership between the public, private and third sector.

#### 3.0 Reducing energy demand in commercial buildings

- 3.1 The energy demands from commercial buildings in Greater Manchester also needs to see a significant reduction, with modelling informing Greater Manchester's 5 Year Environment Plan based on a 30% decrease in commercial space heating demand by 2040.
- 3.2 There are similar barriers to reducing energy demand in Greater Manchester's commercial buildings. At present, the incentives for and ability of commercial property owners to retrofit their buildings to achieve these level of reductions are mixed. The valuing of energy efficiency in commercial buildings therefore needs to be built up in the market through better measurement and reporting, which would drive improvements. This includes:
  - Building measurement and reporting into new developments using the planning system (<u>Recommendation 6</u>).
  - Setting out a pathway for embedding measurement and reporting for commercial building heat demand, starting with voluntary reporting whilst looking at ways to encourage this (e.g. via nudge) or mandate this in the future (Recommendation 7).

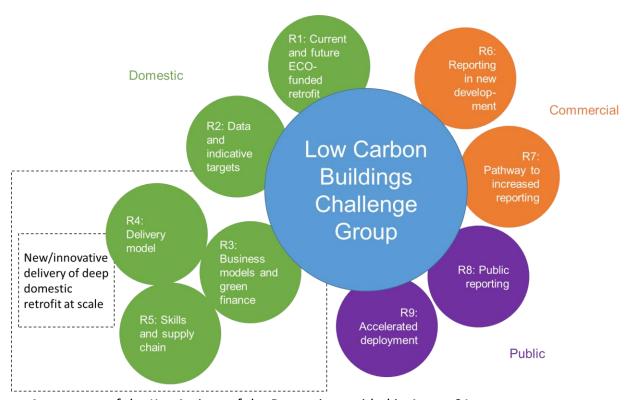
#### 4.0 Reducing energy demand in public buildings

4.1 At the same time, GM's public sector needs to lead by example in reducing the energy demand of its buildings. GMCA and local authorities have already made commitments around delivering greater energy efficiency of their buildings as part of the 5 Year Environment Plan. This should be adopted by other public sector organisations in Greater Manchester (e.g. health sector, universities) and measurement and reporting standardised to help drive up standards (Recommendation 8). Other organisations beyond the GMCA and local authorities should set ambitions and targets for energy efficiency as a result and deliver improvements against these (Recommendation 9).

#### 5.0 How to take this forward

5.1 Tackling forward this challenge and implementing the recommendations in this report must be a joint effort between the public, private and third sectors. These organisations can each bring different areas of expertise to help take forward these recommendations. In addition, national government has some of the most powerful levers to tackling the issues set out here

- this report provides a means of engaging government on Greater Manchester's needs and priorities for all organisations above.
- 5.2 Given that, and the ambition of the 5 Year Environment Plan to adopt a mission-oriented approach to its implementation, it is recommended that a Low Carbon Buildings Challenge Group be established in Greater Manchester as part of the Green City Region Partnership, providing a more formal means of bringing these organisations together to take forward the recommendations in this report and drive the change needed in Greater Manchester's buildings (Recommendation 10). This reflects the complex nature of the challenges faced and the need for coordinated action across sectors.



A summary of the Key Actions of the Report is provided in Annex 01.

#### 6.0 Recommendations

It is recommended that Committee:

• Note and comment upon the contents of this report and its recommendations

#### **ANNEX 01 Summary of the Report's Recommendations**

The report provides 10 key recommendations to accelerate delivery:

No.	Detail
1	Partners across Greater Manchester should develop proposals for and push for changes to current the current ECO framework when it ends in 2022 to better align it with the city-region's ambitions.
2	Further research should be carried out to identify appropriate space heating demand targets for Greater Manchester property types, informed by the emissions reductions in the SCATTER model. This work would provide a set of indicative targets required from the retrofit of homes to meet Greater Manchester's ambitions and that can be feasibly delivered at Greater Manchester's property types.
3	The GMCA, key partners and investors should work together to develop commercially attractive business models for investment in retrofit of social and private housing. At the same time, GMCA, working with key partners and government (to consider this as part of national policy and green finance initiatives), should develop options for the potential use of council tax as a "nudge" to increase energy efficiency.
4	The GMCA, learning and skills support agencies, providers, innovation hubs and existing trade bodies should come together to understand the future needs and opportunities presented by whole-house deep retrofit and develop packages of work to tackle the issues this identifies.
5	Partners in Greater Manchester should collaborate to develop a delivery model to build up local markets for whole-house deeper retrofit. This should build on the findings of recent work in this area, including government funded pilots like People Powered Retrofit and RetrofitWorks.
6	GMCA and local authorities should explore the potential for introducing requirements for new developments to report on operational energy performance, and as part of that, on space heating demand.
7	Working with key partners, GMCA should develop and implement a pathway to lead to an increase in the measurement, reporting and improvement of energy efficiency in commercial buildings, and as part of that, on space heating demand.
8	GMCA, local authorities and the public sector across Greater Manchester should ensure standardised measurement and annual reporting (as part of reporting against the 5 Year Environment Plan) on the energy efficiency of their buildings, including their Display Energy Certificate ratings and a measure of space heating demand.
9	GMCA and local authorities should work to deliver agreed targets for the energy efficiency of their buildings, including their Display Energy Certificate ratings and developing a measure and targets for space heating demand, and encourage other public sector organisations to do likewise.
10	Put in place Greater Low Carbon Buildings Challenge Group, which, through establishing specific task and finish groups, would provide cross-sector approach to tackling the systemic challenges associated with retrofit across all building types.

# DECARBONISING GREATER MANCHESTER'S EXISTING BUILDINGS

# A REPORT TO THE GREATER MANCHESTER COMBINED AUTHORITY

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#### **EXECUTIVE SUMMARY**

### The importance of buildings in meeting Greater Manchester's environmental ambitions

In its 5 Year Environment Plan, Greater Manchester set an ambition to be carbon neutral by 2038. Reducing the amount of energy used in Greater Manchester's existing buildings will be key to achieving this aim, especially given 95% of Greater Manchester's existing buildings are still likely to be in use by 2050.

This report builds on the priorities and actions on buildings in the 5 Year Environment Plan. It sets out where Greater Manchester is now and where it needs to get to in terms of the energy demand of its existing domestic, commercial and public buildings. Based on that, it provides a set of recommendations for taking action.

#### The opportunity and the need to take action

Investing in reducing the energy used in Greater Manchester's buildings offers a significant opportunity that would bring with it multiple benefits, not just for the city-region's environmental ambitions.

For Greater Manchester's residents, homes that are warmer, more comfortable and have good ventilation are healthier homes, improving people's physical and mental health. They are also cheaper to heat, meaning Greater Manchester residents and businesses would spend less on their fuel bills and be more resilient to future energy price rises.

For Greater Manchester's economy, a healthier population means increased productivity and less public spending on healthcare. Businesses that use their energy more efficiently are more productive and also provide better environments to work in – they can also be more attractive to potential employees and better at retaining staff. Investment in improvements in Greater Manchester's building stock also presents an opportunity for growth in jobs and skills in the construction and associated sectors in the city-region.

For Greater Manchester's environment, tackling energy demand in existing domestic, commercial and public buildings is crucial to meeting its ambitions for carbon neutrality. Modelling shows that without action to increase the extent and depth of current activity in this area, Greater Manchester will not be able to meet its aims. The step-change this modelling shows is required informs the approach proposed and recommendations made in the rest of this report so that Greater Manchester can realise its ambitions.

#### Reducing energy demand in homes

In Greater Manchester's homes, continued effort is needed to ramp up actions to help reduce the energy demand of those residents in or at risk of falling into fuel poverty, continuing to maximise the use of national funding streams (particularly Energy Company Obligation – ECO – funding) by using local flexibilities, whilst making the case for greater local influence so that this funding better aligns with Greater Manchester's ambitions. This funding does not currently provide for the extent and depth of improvements needed in homes to meet Greater Manchester's environmental and wider ambitions (Recommendation 1).

At the same time, Greater Manchester needs to scale up deeper retrofit of homes across the city-region. This presents significant opportunities to realise the benefits set out above – for improving people's health and increasing wealth. To realise the scale of reduction in CO<sub>2</sub> emissions from reducing buildings' demand for energy, Greater Manchester need tens of thousands of deeper retrofits every year. Modelling informing Greater Manchester's 5 Year Environment Plan is based on 61,000 retrofits a year which, on average, reduce heat loss per house by 57%. At present, deeper retrofit projects achieving this scale of reduction are pilots of 10s or at most 100-200 homes, or are not retrofitting to the depth needed.

There are barriers that prevent scaling up what has been achieved in these projects and which would need to be overcome to realise domestic retrofit to the extent and depth required. These barriers include:

- The need to adopt a whole-property (or whole-house) approach to retrofit, understanding what level of reduction in demand (in particular for heating) and CO<sub>2</sub> emissions can be achieved across Greater Manchester's different types of properties (Recommendation 2). At the same time, a whole-house approach needs to be embedded to make sure that retrofit measures are always carried out as part of an overall plan for that property to avoid piecemeal change or unintended consequences.
- The need to develop attractive financial offers for homeowners and financial models for investors (in the public and private sectors) to overcome the high up-front capital costs of deeper retrofit (Recommendation 3). Patient finance, such as green mortgages, equity loans and other forms of loan funding (e.g. revolving loan fund), needs to be available at scale to overcome this barrier.
- The need to develop both the capability (upskilling) and capacity of the supply chain required to deliver deeper retrofit. The supply chain for retrofit will not develop without first seeing, real, evidenced demand emerge, meaning that the supply chain and the stimulation of demand needs to take place in tandem. In particular, the issue of a shortage of a sufficiently large skilled workforce to deliver on this scale needs to be tackled across providers, learning and skills support agencies and trade bodies (Recommendation 4).
- The need to develop delivery models that build awareness of whole-house deeper retrofit, target those people most likely to be early adopters of it, build trust in delivery and the supply chain and coordinate a smooth customer journey through the process (Recommendation 5).

Tackling these challenges in a way that then enables the retrofit of domestic properties at the required scale and depth will require innovative approaches to delivery in partnership between the public, private and third sector.

#### Reducing energy demand in commercial buildings

The energy demand from commercial buildings in Greater Manchester also needs to see a significant reduction, with modelling informing Greater Manchester's 5 Year Environment Plan based on a 30% decrease in commercial space heating demand by 2040.

There are similar barriers to reducing energy demand in Greater Manchester's commercial buildings. At present, the incentives for and ability of commercial property owners to retrofit their buildings to achieve these level of reductions are mixed. The valuing of energy efficiency in commercial buildings therefore needs to be built up in the market through better measurement and reporting, which would drive improvements. This includes:

- Building measurement and reporting into new developments using the planning system (Recommendation 6).
- Setting out a pathway for embedding measurement and reporting for commercial building heat demand, starting with voluntary reporting whilst looking at ways to encourage (e.g. via nudge) or mandate this in the future (Recommendation 7).

#### Reducing energy demand in public buildings

At the same time, Greater Manchester's public sector needs to lead by example in reducing the energy demand of its buildings. GMCA and local authorities have already made commitments around the energy efficiency of their buildings as part of the 5 Year Environment Plan. This should be adopted by other public sector organisations in Greater Manchester (e.g. health sector, universities) and measurement and reporting standardised to help drive up standards (Recommendation 8). Other organisations beyond the GMCA and local authorities should set ambitions and targets for energy efficiency as a result and deliver improvements against these (Recommendation 9).

#### How to take this forward

Tackling forward this challenge and implementing the recommendations in this report must be a joint effort between the public, private and third sectors. These organisations can each bring different areas of expertise to help take forward these recommendations. In addition, national government has some of the most powerful levers to tackling the issues set out here – this report provides a means of engaging government on Greater Manchester's needs and priorities.

Given that and the ambition of the 5 Year Environment Plan to adopt a mission-oriented approach to its implementation, it is recommended that a Retrofit Challenge Group be established in Greater Manchester as part of the Green City Region Partnership, providing a more formal means of bringing these organisations together to take forward the recommendations in this report and drive the change needed in Greater Manchester's buildings (Recommendation 10). This reflects the complex nature of the challenges faced and the need for coordinated action across sectors.

#### **List of recommendations**

No.	Detail
1	Partners across Greater Manchester should develop proposals for and push for changes to current the current ECO framework when it ends in 2022 to better align it with the city-region's ambitions.
2	Partners across Greater Manchester should carry out further research to identify appropriate space heating demand targets for Greater Manchester property types, informed by the emissions reductions in the SCATTER model. This work would provide a set of indicative targets required from the retrofit of homes to meet Greater Manchester's ambitions and that can be feasibly delivered at Greater Manchester's property types.
3	The GMCA, key partners and investors should work together to develop commercially attractive business models for investment in retrofit of social and private housing. At the same time, GMCA, working with key partners and government (to consider this as part of national policy and green finance initiatives), should develop options for the potential use of council tax as a "nudge" to increase energy efficiency.
4	The GMCA, learning and skills support agencies, providers, innovation hubs and existing trade bodies should come together to understand the future needs and opportunities presented by whole-house deep retrofit and develop packages of work to tackle the issues this identifies.
5	Partners across Greater Manchester should collaborate to develop a delivery model to build up local markets for whole-house deeper retrofit. This should build on and learn from the findings of recent work in this area, including government funded pilots like People Powered Retrofit and RetrofitWorks, as well as previous programmes like Green Deal Communities.
6	The GMCA and local authorities should explore the potential for introducing requirements for new developments to report on operational energy performance, and as part of that, on space heating demand.
7	Working with key partners, GMCA should develop and implement a pathway to lead to an increase in the measurement, reporting and improvement of energy efficiency in commercial buildings, and as part of that, on space heating demand.
8	The GMCA, local authorities and the public sector across Greater Manchester should ensure standardised measurement and annual reporting (as part of reporting against the 5 Year Environment Plan) on the energy efficiency of their buildings, including their Display Energy Certificate ratings and a measure of space heating demand.
9	The GMCA and local authorities should work to deliver agreed targets for the energy efficiency of their buildings, including their Display Energy Certificate ratings and developing a measure and targets for space heating demand, and encourage other public sector organisations to do likewise.
10	The GMCA should put in place a Greater Manchester Low Carbon Buildings Challenge Group, which, through establishing specific task and finish groups, would

provide cross-sector approach to tackling the systemic challenges associated with retrofit across all building types.

#### 1. INTRODUCTION AND SCOPE OF THIS REPORT

#### 1.1 Introduction

Greater Manchester's buildings provide the homes in which people live and the places in which people work, spend their spare time and access public services. The city-region's buildings are essential to health and prosperity. Greater Manchester needs safe, good quality housing to live healthy, prosperous lives; it needs good quality workplaces to attract, retain and grow businesses; and it needs good quality public buildings in which people can access public services (e.g. education, health) and spend their spare time (e.g. accessing leisure and culture).

Having buildings that use less energy – are warm, safe, healthy, comfortable and cheaper to heat and produce lower  $CO_2$  emissions – is a key part of this. A building's energy demand and how it uses its energy is a key factor in a building's comfort and the cost for its owner or occupier to power and heat it.

Alongside energy generation, a building's energy demand also has a key impact on a building's environmental footprint, with buildings a significant source of CO<sub>2</sub> emissions generated within Greater Manchester. 33% of Greater Manchester's CO<sub>2</sub> emissions are generated in homes, with a further 32% in business and industrial premises. Reducing CO<sub>2</sub> emissions from its buildings will be therefore be vital to Greater Manchester's wider aims for making its fair contribution to mitigating climate change and in delivering the ambitions set out in its 5 Year Environment Plan.

#### 1.2 Scope

This report focusses on the action needed to decarbonise Greater Manchester's buildings to realise the multiple benefits this can bring. The report's main focus is on reducing their *demand* for energy through improvements to a building's fabric. The *supply* of energy to buildings is also crucial to decarbonising them. The priorities and actions required to decarbonise the sources of power (renewable energy generation) and heat (low carbon heating) to buildings is set out in Greater Manchester's Smart Energy Plan<sup>1</sup>. These are not duplicated in this report – however, it is recognised in this report that, at the level of a particular building or group of buildings, putting in place measures to a building's fabric that reduce demand alongside energy generation/storage is likely to deliver multiple benefits, for both the homeowner/occupier and in reducing CO<sub>2</sub> emissions.

In terms of the priorities related to reducing energy demand, the following points set out the scope of this report:

- Ways of reducing energy demand the report's main focus is on how efficient buildings are at being heated and kept warm, whilst maintaining good levels of ventilation. This is due to the fact that this is the most significant challenge in reducing CO<sub>2</sub> emissions from buildings. Other activities, which result in energy demand in buildings are less significant and are not covered within this report. These include:
  - Active cooling these technologies (e.g. air conditioning) are generally not installed at domestic properties. In commercial properties, active cooling is estimated to only account for an eighth of the energy consumption that

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<sup>&</sup>lt;sup>1</sup> https://es.catapult.org.uk/news/smart-energy-plan-greater-manchester-combined-authority/

- heating does<sup>2</sup> (0.75 TWh/year for cooling versus 5.8 TWh/year for heating). However, the demand for cooling is likely to increase in future years given the predicted impacts of climate change on Greater Manchester. Cooling will therefore need to be taken into account in the design and carrying out of retrofitting of buildings, particularly in ventilation, glazing and shading.
- Hot water the efficiency of hot water systems is largely reliant on the efficiency of the appliance and system installed, with new appliances required to meet certain efficiency rating standards.
- Appliances and lighting efficiency continues to be driven up by product design standards, requiring certain efficiency rating standards in new products.
- Industrial energy use the use of energy for industrial processes is not covered within this report and will instead be looked at through the development of a Greater Manchester Sustainable Consumption and Production Plan, which will include a focus on resource efficiency.
- Age of buildings the report largely focusses on existing buildings rather than new buildings that will be constructed in the future. In Greater Manchester, there are around 1.2 million existing homes (see Figure 1 for the age of Greater Manchester's domestic properties), of which the vast majority (95%) are likely to still be in use by 2050. The Greater Manchester Spatial Framework sets out the objective to deliver 201,000 new homes by 2037, alongside ambitions for office, industrial and warehousing space. The approach of the GMCA and Local Authorities to decarbonising new buildings and developments through spatial planning policy is set out in the Greater Manchester Spatial Framework<sup>3</sup>.

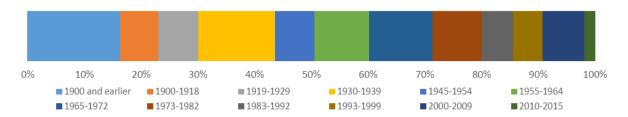


Figure 1: Age distribution of Greater Manchester's domestic properties.

Source: Greater Manchester Spatial Energy Plan<sup>4</sup>

 Type and use of buildings – this report recognises the differences between domestic and non-domestic properties. Within the latter category, the report looks at commercial and public buildings separately.

<sup>&</sup>lt;sup>2</sup> Spatial Energy Plan (2016) – extrapolating figures for cooling demand across the north west to a Greater Manchester level (using a per capita measure).

<sup>&</sup>lt;sup>3</sup> https://www.greatermanchester-ca.gov.uk/what-we-do/housing/greater-manchester-spatial-framework/

<sup>&</sup>lt;sup>4</sup> https://es.catapult.org.uk/wp-

 $<sup>\</sup>frac{content/uploads/2018/10/Compressed\_GMCA\_Spatial\_Energy\_Plan\_2016\_11\_07-LATEST-ilovepdf-compressed\_pdf$ 

#### 1.3 Structure of this report

The subsequent sections of this report are structured as follows:

- Section 2 why Greater Manchester needs to take action now to reduce energy demand in its existing buildings.
- Sections 3, 4 and 5 these take domestic, commercial and public buildings in turn, with each looking at:
  - Where Greater Manchester needs to get to
  - Where Greater Manchester is now and what this means for what needs to be done now and over the next 5 years.
- Section 6 how the recommendations set out in this report should be taken forward by the GMCA and key stakeholders.

#### 2. WHY DOES GREATER MANCHESTER NEED TO TAKE ACTION?

#### 2.1 The multiple benefits of taking action

Taking action to reduce energy demand in Greater Manchester's existing buildings can have multiple benefits across numerous areas, for:

- People for residents' health, education, jobs, income and productivity.
- Economy improved productivity and the potential for the creation of new jobs and new skills as well as reduced pressures on public finances.
- Environment making a significant contribution to reducing CO<sub>2</sub> emissions.

These are set out in further detail below.

#### 2.2 Benefits for Greater Manchester's residents

Reducing energy demand through making improvements to a building's fabric offers substantial <u>health benefits</u>. Homes that are cold and have poor ventilation and internal air quality exacerbate existing conditions (such as respiratory illnesses or mental health conditions), particularly in the young and elderly. For example, research has shown that:

- Excess winter deaths are three times higher in the coldest quarter of homes compared to the warmest quarter<sup>5</sup>. The 2016/17 winter saw 34,300 excess winter deaths across the UK, of which around 30% were estimated to be attributable to living in a cold home<sup>6</sup>.
- Children living in inadequately heated households are twice as likely to suffer from conditions such as asthma and bronchitis as those living in warm homes<sup>4</sup>.
- Those living with a bedroom below 15°C are 50% more likely to suffer from mental conditions such as depression and anxiety than those with a well-heated bedroom.

Alongside health benefits, reducing energy demand can also have <u>economic benefits</u> for individuals and households associated with lower fuel bills (which can potentially be used to contribute to funding building fabric improvements) and greater resilience to future rises in energy prices.

This is of particular importance in Greater Manchester, where it is estimated that 157,000 households (c.13% of all households) are classified as being in fuel poverty – in that they cannot afford to adequately heat their home<sup>7</sup>. Across Greater Manchester's 10 districts, all except Stockport have fuel poverty rates above the national average (Figure 2). In Manchester, nearly 1 in 5 residents (17.9%) live in fuel poverty. Fuel poverty rates across all 10 districts have increased over the last 3 years. Spatial analysis of fuel poverty across Greater Manchester (see Spatial Energy Plan) in 2016 showed that areas of central Manchester and Fallowfield had the highest density of fuel poverty – areas which also have greater amounts of older housing in poor condition.

<sup>&</sup>lt;sup>5</sup> https://friendsoftheearth.uk/sites/default/files/downloads/cold\_homes\_health.pdf

<sup>6</sup> https://www.e3g.org/docs/E3G\_NEA\_Cold\_homes\_and\_excess\_winter\_deaths\_Press\_Release.pdf

<sup>&</sup>lt;sup>7</sup> https://www.gov.uk/government/collections/fuel-poverty-statistics

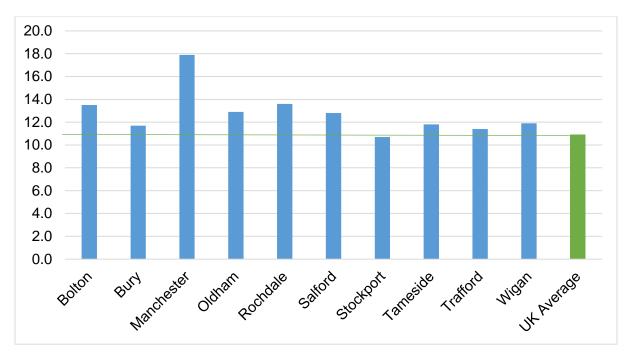


Figure 2 – Proportion (%) of Greater Manchester households in fuel poverty by district

Source: Fuel Poverty Sub Regional Statistics<sup>8</sup>

As well as the link between energy demand and energy bills, the proportion of household income spent on energy can have <u>knock-on impacts</u> – including on nutrition (e.g. how well a household can afford to eat) and household relationships (e.g. due to the stresses of managing a household's bills and expenses). Research has shown that energy efficiency improvements can also help improve the equality of opportunities from lower income groups – for example, an energy efficiency programme in New Zealand led to a 21% fall in children's absence from school over winter months and fewer GP visits<sup>9</sup>.

#### 2.3 Benefits for Greater Manchester's economy

Investing in reducing energy demand and making buildings more energy efficient can also have significant wider <u>economic benefits</u>. Research in 2014<sup>10</sup> indicated that energy efficiency programmes can have a benefit to cost ratio of 2.27 to 1, representing a potential "high value" infrastructure programme that would also target low income households. A major infrastructure programme, as modelled in this research, would lead to an increase in net employment of around 70,000 new jobs across the UK by 2030. Improvements beyond those underpinning this model are required to achieve Greater Manchester's ambitions (see section 2.4.2). This will require greater expenditure, potentially reducing that cost-benefit ratio unless further benefits can be quantified. However, this investment would also generate more jobs, with the potential to create 55,000 jobs in Greater Manchester alone.

<sup>&</sup>lt;sup>8</sup> https://www.gov.uk/government/collections/fuel-poverty-sub-regional-statistics

<sup>&</sup>lt;sup>9</sup> https://www.asthmafoundation.org.nz/research/improving-health-and-energy-efficiency-through-community-based-housing-interventions

<sup>10</sup> https://www.housingnet.co.uk/pdf/Building-the-Future-Final-report October-2014 ISSUED.pdf

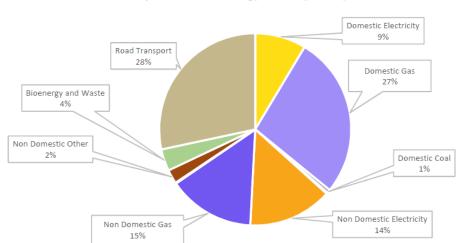
There are also potential benefits to the wider economy, in terms of reducing the economic losses associated with poor energy efficiency through missed work, missed time at school and lower productivity. Increased energy efficiency can increase social mobility, for example as a result of positive impacts on school attendance and educational attainment, which would have a knock on effect on job and employment prospects of lower income households. In commercial buildings, businesses that lower their energy costs will, by association, be more competitive, productive and profitable. There is also evidence that businesses that are more sustainable are more attractive to potential employees<sup>11</sup> and potentially healthier and therefore more productive workplaces<sup>12</sup>. Emerging markets for more energy efficient commercial buildings also present an opportunity for commercial landlords.

Improving energy efficiency can also have positive impacts for public spending. The cost of cold homes to the NHS has been estimated to be between £600m-£2.5bn (depending on the method used<sup>13</sup>), or up 1.7% of total NHS spending (as of 2016/17 figures). Investing £1 in keeping homes warm is estimated to save the NHS £0.42 in direct health costs<sup>14</sup>. There is therefore the potential to make significant savings in public health costs if energy efficiency of homes can be improved. This could also extend to other public services, including income support and debt advice, if energy costs decrease. Improving energy efficiency across the public estate offers potential bill savings that could be redirected into public services.

#### 2.4 Benefits for Greater Manchester's environment

#### Buildings' energy use and CO<sub>2</sub> emissions

Greater Manchester's buildings use significant amounts of energy. The types of energy and sectors where it is used is set out in Figure 3.



Proportion of GM energy consumption by sector

Figure 3 – Proportion of energy consumption by sector in Greater Manchester

Source: Greater Manchester Spatial Energy Plan

<sup>11</sup> https://www.fastcompany.com/90306556/most-millennials-would-take-a-pay-cut-to-work-at-a-sustainablecompany

12 https://www.ukgbc.org/ukgbc-work/health-wellbeing-productivity-offices-next-chapter-green-building/

<sup>13</sup> https://www.bre.co.uk/filelibrary/pdf/87741-Cost-of-Poor-Housing-Briefing-Paper-v3.pdf

<sup>14</sup> http://www.sthc.co.uk/Documents/CMO\_Report\_2009.pdf

This shows that 58% of the energy used in Greater Manchester's domestic and non-domestic buildings is gas, with electricity providing 32%, and 10% coming from other sources (including coal, bioenergy and energy from waste). Across Greater Manchester's homes, 73% of energy used is gas for heating (with 95% of Greater Manchester postcodes connected to the gas grid), with a further 24% of energy use being electricity. Coal is used in relatively small proportions (3%) but is higher in certain parts of the city region (most notably in Wigan, where coal accounts for 8% of energy use in homes).

In non-domestic buildings, energy use varies depending on the activities carried out – overall, gas and electricity make up about half each of energy use in non-domestic buildings. Unless action is taken, the predicted growth in Greater Manchester's population, the planned number of new homes and amount of new commercial floorspace will lead to a 3% increase in energy demand by 2035, arising from heating and electricity use in these new buildings.

The energy used in Greater Manchester's buildings translates to them being a significant contributor to the city-region's CO<sub>2</sub> emissions (see Figure 4).

Proportion of carbon emissions by sector

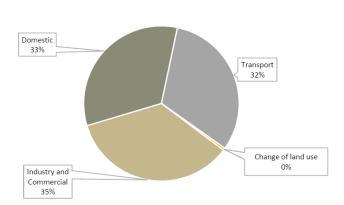


Figure 4 – Proportion of carbon emissions by sector in Greater Manchester

Source: Greater Manchester Spatial Energy Plan

#### 2.4.2 The scale of reductions in CO<sub>2</sub> emissions required

#### 2.4.2.1 The use of models to inform CO<sub>2</sub> reduction pathways

Taking action to reduce buildings' energy consumption is therefore vital in achieving Greater Manchester's wider aims for its contribution to global efforts to mitigate climate change. The vision for how the city-region will do this is set out in the 5 Year Environment Plan for Greater Manchester<sup>15</sup> and is supported by a set of aims, including the following for reducing the city-region's CO<sub>2</sub> emissions:

"For our city-region to be carbon neutral by 2038 and meet carbon budgets that comply with international commitments."

<sup>15</sup> https://www.greatermanchester-ca.gov.uk/media/1986/5-year-plan-branded\_3.pdf

This aim is based on research<sup>16</sup> by the Tyndall Centre for Climate Research, which calculated a carbon budget for Greater Manchester that is compatible with the Paris Agreement. During the development of the 5 Year Environment Plan, the GMCA commissioned research using two tools to understand potential CO<sub>2</sub> emission reduction pathways for Greater Manchester to meet this aim. These are as follows:

- Setting City Area Targets and Trajectories for Emissions Reductions (SCATTER)<sup>17</sup> this is a model that provides different emission reduction pathways depending on local decisions taken across over 40 different interventions (including on the energy demand of buildings), which can each be implemented to 4 different extents. This allows the tool to be adapted to reflect local circumstances and provides a modelled pathway based on decisions across these interventions.
- Energy System Modelling Environment (ESME) this model considers the whole UK energy system and models the most cost effective way of Greater Manchester both becoming carbon neutral by 2040 and attempting to minimise emissions prior to then. The model is driven by the target put into it, and will output the most cost-effective way to achieve that.

The graph below (Figure 5) sets out potential carbon reduction pathways for Greater Manchester from the SCATTER model, upon which the actions in the 5 Year Environment Plan is based, against the budget recommended by the Tyndall Centre's research.

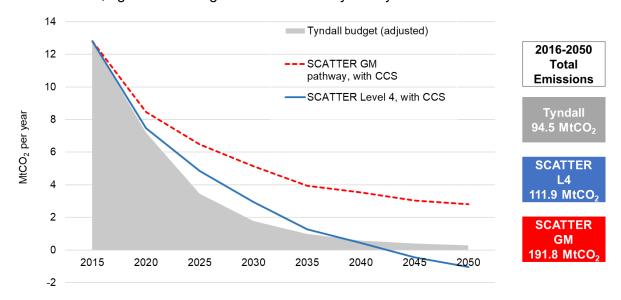


Figure 5 – Potential Carbon Reduction Pathways for Greater Manchester

Source: Anthesis

This sets out two scenarios:

- A "SCATTER Level 4" pathway – in which each of the 40+ interventions in the model are pulled to the maximum extent. Under this model, carbon neutrality is possible to achieve but even under this highly ambitious and transformative scenario, emissions

https://www.research.manchester.ac.uk/portal/files/83000155/Tyndall Quantifying Paris for Manchester Report \_\_FINAL\_PUBLISHED\_rev1.pdf

<sup>17</sup> https://www.anthesisgroup.com/scatter-carbon-footprint-reduction-tool

- of nearly 20% above the Tyndall Centre's recommended budget<sup>18</sup> are produced in Greater Manchester by 2050.
- A "SCATTER GM" pathway in which each of the 40+ interventions in the model are set according to an estimate of what is currently planned and what might be achievable in the future in Greater Manchester. Under this model, emissions of over double the Tyndall's recommended budget are produced by 2050 despite it still requiring significant transformative change.

#### 2.4.2.2 Using these models to inform the action needed

Underpinning these trajectories, the models show us the scale of change required and an indication of the actions required to achieve these levels of reductions.

The models highlight the importance of the role of the energy used in buildings in achieving emissions reductions. In SCATTER, emissions from both domestic and non-domestic buildings (from both the energy they are supplied with and the amount of energy they are used) each reduce by around 50% by 2025 (on a 2015 baseline) (see Figure 6).

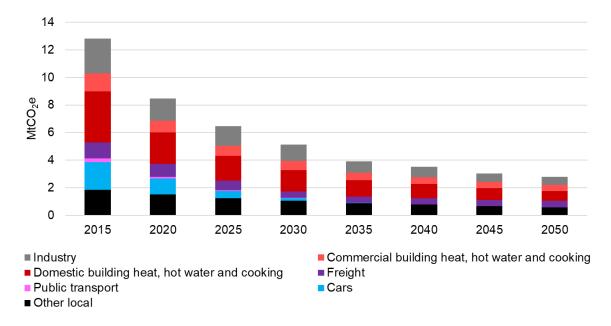


Figure 6 – Sectors where emission reductions come from ("SCATTER GM" pathway)

Source: Anthesis

In the ESME model, less significant reductions in emissions from buildings are made up to 2030, at which point emissions are reduced dramatically, driven predominantly by the uptake of low carbon heating systems alongside less significant decreases in energy demand than in SCATTER (see Figure 7 below).

<sup>&</sup>lt;sup>18</sup> Extrapolated to cover 2015-2050 from 2018-2050 in the Tyndall Centre's original report

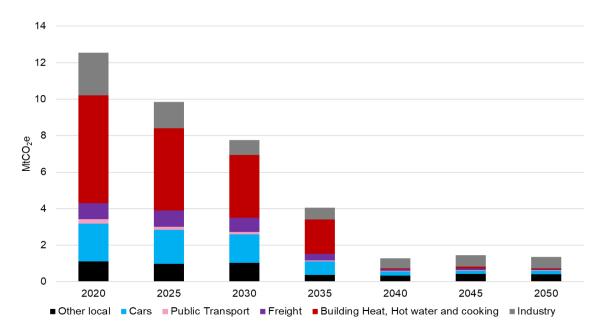


Figure 7 – Sectors where emission reductions come from (ESME pathway)

Source: Energy Systems Catapult

Despite differences in the timing and extent of reductions in emissions from buildings, the models are in agreement in the types of actions that are needed in order to realise reductions in emissions. The reductions set out in the SCATTER and ESME models are both based on reducing the demand for energy in buildings through the installation of measures to a building's fabric to improve thermal performance. Further detail on this is set out below.

#### a. For domestic properties:

In SCATTER, the model makes assumptions about the level of different insulation measures retrofitted at homes across Greater Manchester by 2040. The table below shows the assumed levels of penetration into Greater Manchester's homes by 2040 of these measures. This translates into 61,000 homes per year requiring some sort of retrofit (but averaging a 57% decrease in "thermal leakiness" – a measure of heat loss – per house) being carried out in the SCATTER GM pathway.

Retrofit Measure	SCATTER L4 Assumption i.e. assumed technical capacity for these measures (% of households by 2040)	SCATTER GM Assumption (% of households by 2040)	
Solid wall insulation	28%	24%	
Cavity wall insulation	32%	28%	
Floor insulation	42%	36%	

Superglazing (i.e triple glazing)	83%	72%
Lofts	78%	68%
Draughtproofing	88%	76%

In the ESME model, less ambitious interventions are made in terms of extent (about 60% fewer properties per year than SCATTER) and depth of the measures put in place. In the ESME model, emissions reductions are instead driven to a greater extent by the decarbonisation of energy supply, through the electrification of home heating. This is due to the model implementing the most cost-effective measures at a national or whole system level. The measures chosen by the model is a package that, where appropriate includes, wall insulation, loft insulation, floor edge insulation, draught stripping, single room heat recovery and heating controls. It does not include floor insulation, window replacement and door replacement, which the model does not choose to use due to their cost. This package is expected to deliver on average a 20-30% energy saving.

The models therefore highlight the potential choice to be made between both the number of homes at which improvements are made and the level of the measures to be implemented. However, they both indicate the need for a step change in the extent and level of current uptake of measures.

#### b. For commercial and public buildings:

The models are more similar in their assumptions about energy demand in commercial and public buildings. Again, the reductions in SCATTER are more significant than in ESME, as set out below.

Timeframe	Reduction in heating and cooling demand – SCATTER GM	Reduction in heating and cooling demand – ESME
By 2025	10%	5%
By 2030	13%	8%
By 2035	17%	10%
By 2040	22%	13%

Both ESME and SCATTER model reductions that will be extremely challenging to achieve, requiring unprecedented transformational change and financial investment. Turning these scenarios into reality requires immediate, radical actions over the next 5 years and beyond.

For all building types, the SCATTER GM model highlights the need to act quickly to reduce energy demand in buildings. If there was to be no change in how Greater Manchester's heat

was supplied (e.g. a shift to electrified heating and/or heat networks or hydrogen ingress into the gas grid) or in its demand over the next 5 years, all other sources of CO<sub>2</sub> emissions (including from private vehicles, buses, industry and freight) would have needed to reduce to zero by 2025 in order for us to reduce emissions in line with the SCATTER GM model.

The models result in different futures for Greater Manchester. ESME would see us more reliant on decarbonisation of the national gird rather than local renewable generation. As set out above, the ESME model also places less reliance on local efforts to reduce demand. It models this approach as the most cost-effective way to reduce emissions, but does not account for the wider benefits to Greater Manchester of greater local renewable energy generation and local reductions in demand. Acting locally to reduce energy demand also provides a low/no regrets way of reducing CO<sub>2</sub> emissions, particularly if efforts to decarbonise the supply of energy (e.g. through local electricity generation or decarbonising heat) fail to deliver on the scale required. Taking this local approach at a city-region scale is supported by the direction of policy in this area at an EU<sup>19</sup> and UK scale.

As it did through its 5-Year Environment Plan, Greater Manchester therefore needs to base its ambitions, approach and targets on the type and scale of action required in the SCATTER model to reduce CO<sub>2</sub> in buildings. The subsequent sections taking domestic properties and then non-domestic properties (commercial and public buildings) in turn are informed by this modelling work.

<sup>19</sup> https://cor.europa.eu/en/news/Pages/unlocking-the-potential-of-local-energy-communities-.aspx

#### 3. DOMESTIC PROPERTIES

#### 3.1 WHERE DOES GREATER MANCHESTER NEED TO GET TO?

#### 3.1.1 Priorities for decreasing energy demand in domestic properties

For domestic properties, these challenges and underpinning evidence points to a two-pronged approach to reducing energy demand in Greater Manchester's homes:

- 1. **Tackling fuel poverty** through supporting the installation of energy efficiency measures to maximise the co-benefits of more energy efficient, warm and healthy homes for people's health, well-being and prosperity and for the wider economy.
- 2. Delivering the level of energy demand reduction required across all households to meet Greater Manchester's aims for CO₂ emissions reductions through upscaling whole-house deeper retrofit of measures (thermal elements, improved air tightness along with the provision of ventilation with heat recovery) to increase energy efficiency to a greater degree (at the property level) and extent (across a wider range of households).

#### 3.1.2 Tackling fuel poverty by reducing energy demand

Given the level and persistence of fuel poverty across households in Greater Manchester and the potential wide range of benefits for people, the economy and environment from tackling it, reducing the number of households in fuel poverty by reducing the energy demand in their homes should remain a key priority. Approaches should focus on prioritising those households that are hardest to engage, taking local approaches to targeting them.

# 3.1.3 Delivering the level of fabric improvements required across all households to meet Greater Manchester's aims for CO<sub>2</sub> emissions reductions

The results of both the SCATTER and ESME models set out in section 2.4.2 indicate that a step change in reducing the energy demand of homes is required. However, the interventions in both SCATTER and ESME are indicative of the overall scale of change required, rather than being a prescriptive or transferrable set of interventions required to be put in place across Greater Manchester's housing stock. The reductions in the SCATTER model therefore need to be translated to a measurable target of space heating demand and  $CO_2$  emissions required at the level of each individual home.

At present, there are measures for the energy efficiency of homes. The most well-known and widespread of these is the Energy Performance Certificate (EPC). EPCs contain information about a property's energy use and typical energy costs and recommendations about how to reduce energy use and save money. Ratings are required for properties at the point of construction, sale or rent<sup>20</sup>. However, ratings are affected by measures beyond energy demand (e.g. renewable energy generation) and forthcoming changes are planned in the methodology that underpins the ratings. EPC ratings on their own are therefore not particularly useful proxies for energy efficiency; however, the data within them can be

<sup>&</sup>lt;sup>20</sup> A minimum EPC E-rating will be required for all privately rented properties from 1 April 2020.

disaggregated and used as part of developing a measurable target of space heating demand and CO2 emissions required at the level of each individual home.

Separately to EPCs, independent standards and methodologies – such as the Passivhaus standard<sup>21</sup> – have also been developed and implemented, including in properties in Greater Manchester.

Further work is required to develop an appropriate and practicable measure (a space heating demand target) that can inform homeowners and those carrying out works to reduce energy demand in their homes of what needs to be achieved at the level of the individual home to achieve the emissions reductions required and maximise the wider co-benefits of doing so.

#### 3.1.4 Enabling a "just transition"

In focussing on these two areas, it is crucial that this does not lead to a twin-track approach between those able to pay for deeper retrofit measures and those who are either unable to or whose private landlords are unwilling to pay. The focus instead should be on developing approaches that allow deeper retrofit to be extended to those homeowners or tenants who are in fuel poverty or who cannot afford the scale of deep retrofit required. For example, research<sup>22</sup> – "Finance Models for Retrofit" – highlights the potential financial products that could be used for different people and at different scales (e.g. the use of loans from LAs to fuel poor households for energy efficiency improvements, such as the HELP scheme in Manchester<sup>23</sup>).

The overall approach could be through initially focussing on social housing providers and their fuel poor tenants, alongside able-to-pay households, in order to develop models to tackle the current barriers to uptake which exist across all households. Reducing energy demand should be part of wider efforts to improve the quality of housing provided by the private rented sector.

# 3.2 WHERE IS GREATER MANCHESTER NOW AND WHAT ACTION IS NEEDED OVER THE NEXT 5 YEARS?

#### 3.2.1 Tackling fuel poverty by reducing energy demand

#### 3.2.1.1 Current fuel poverty national policy

Fuel poverty initiatives in Greater Manchester are mainly provided for and funded by the government's Energy Company Obligation (ECO), which places legal obligations on larger energy suppliers to deliver energy efficiency measures to domestic premises of for low income, fuel poor and vulnerable householders. The current programme (2018-2022) has a value of around £640m per year across Great Britain.

<sup>&</sup>lt;sup>21</sup> http://passivhaustrust.org.uk/

<sup>&</sup>lt;sup>22</sup> https://shapuk.files.wordpress.com/2018/07/finance-models-for-retrofit-of-all-housing-tenures.pdf

https://www.careandrepair-manchester.org.uk/manchester-services/hrst/the-home-energy-loan-plan/

#### 3.2.1.2 Local fuel poverty initiatives

Local authorities in Greater Manchester are maximising the amount of funding and support available to fuel poor households. This includes specific programmes, such as the following:

- Fuel poverty outreach and advice schemes operating in each borough of Greater Manchester<sup>24</sup>, providing services to low income and vulnerable households of all tenures. This includes home energy advice visits, income maximisation advice, some simple energy efficiency measures (e.g. draught excluders, LED light bulbs) and referrals for larger energy efficiency measures funded by ECO. Through one of these programmes (the Local Energy Advice Programme LEAP) operating over 7 Local Authorities, over the 9 months from June 2018 to April 2019, over 1175 households were visited, with total lifetime bill savings of over £1.2 million achieved.
- Funding under the national Warm Homes Fund scheme. The Greater Manchester
  programme under this national scheme is planned to deliver a total of 500 first time
  central heating systems by autumn 2019. This will reduce bills, increase comfort in
  non-gas fuel poor households, and improve health outcomes for some of the most
  severe levels of fuel poverty.

#### 3.2.2 Gaps and issues with the ECO framework

Although these schemes are vital to the residents that benefit from them, further investment to increase their scale and ambition would be required for them to make a significant contribution to Greater Manchester's aims for reducing its CO<sub>2</sub> emissions.

These obligations are paid for by energy companies via on-bill levies. Given that energy bills account for around 10% of household expenditure for the poorest households and 3% for the richest<sup>25</sup>, this means that poor households make a greater proportionate contribution than richer households. Fuel-poor are also among the least likely to engage in and benefit from schemes like ECO. Analysis by IPPR<sup>26</sup> suggests that elevating all fuel-poor households to government targets of energy efficiency (Energy Performance Certificate Band C) by 2030 will not be achieved until at least 2091 under current rates of installation.

In addition, these measures will not deliver what is required in Greater Manchester to meet its wider ambitions, particularly its aims for CO<sub>2</sub> emissions reductions, given that:

- ECO can only support households in fuel poverty, meaning at least 80% of homes in each district are not eligible.
- The measures currently delivered under ECO, coupled with the government's level of ambition (fuel poor homes to be EPC rated C by 2030) mean these arrangements will not be sufficient to deliver the scale of reductions in CO<sub>2</sub> emissions in Greater Manchester to meet its aims.

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<sup>&</sup>lt;sup>24</sup> Bolton – Care and Repair; Oldham – Warm Homes Oldham; Wigan – AWARM Plus; Bury, Manchester, Rochdale, Salford, Stockport, Tameside, Trafford – Local Energy Advice Programme.

<sup>&</sup>lt;sup>25</sup> http://www.ukerc.ac.uk/publications/funding-a-low-carbon-energy-system.html

https://www.ippr.org/files/2018-07/fuel-poverty-june18-summary.pdf

Recommendation 1: Partners across Greater Manchester should develop proposals for and push for changes to current the current ECO framework when it ends in 2022 to better align it with the city-region's ambitions.

GMCA and local authorities are maximising the use of available ECO funding and local flexibilities in Greater Manchester. The GMCA and key partners should develop proposals for changes to ECO from 2022 and work with government on these, including:

- How funding through general taxation rather than energy bills would benefit Greater Manchester residents.
- How ECO could be transformed from a supplier-led scheme to a local area-based scheme in Greater Manchester, supported by appropriate delivery arrangements.
- How this could support ambitions for a whole-house deeper retrofit approach in Greater Manchester and supporting fuel poor households in this – e.g. through being a component of a blended finance approach to funding retrofit.

# 3.2.1 Delivering the level of fabric improvements required across all households to meet Greater Manchester's aims for CO<sub>2</sub> emissions reductions

#### 3.2.1.1 Taking a whole-house approach

The evidence provided by the modelling work set out in section 2.4.2 indicates that to achieve the scale of reductions in CO<sub>2</sub> emissions required, a step-change in the extent and depth of the current thermal performance of homes is needed to realise significant reductions in energy demand.

As referred to in section 3.1.3, further work is required to understand:

- a) What level of space heating demand is required across Greater Manchester's different types of domestic properties, based on the SCATTER model.
- b) What Greater Manchester's different types of domestic property can feasibly deliver in terms of space heating demand.

Recommendation 2: Partners across Greater Manchester should carry out further research to identify appropriate space heating demand targets for Greater Manchester property types, informed by the emissions reductions in the SCATTER model. This work would provide a set of indicative targets required from the retrofit of homes to meet Greater Manchester's ambitions and that can be feasibly delivered at Greater Manchester's property types.

In order to provide greater clarity on the scale of change in energy efficiency required from existing homes, it is recommended that indicative space heating demand targets (e.g. kWh/m²/year) be developed for Greater Manchester's domestic properties. This should be based on the reductions set out in the SCATTER model, so that the GMCA and stakeholders can understand how much domestic properties can feasibly contribute to the trajectories for CO<sub>2</sub> emissions reductions in Greater Manchester set out in the model.

This target would need to be developed with the input of stakeholders in Greater Manchester, drawing on existing information within EPCs, data available from Ofgem, existing UK standards, and, potentially, emerging data from smart meters. It would need to be adapted for Greater Manchester and to different archetypes, ages and occupancy levels of properties.

Notwithstanding the issue of understanding what needs to be done at the level of the individual property, the installation rate of insulation measures is estimated to have reduced significantly over the last 5-7 years with significant untapped potential to upgrade existing homes<sup>27</sup>. Although national schemes have changed over that period, progress on improving the energy efficiency of buildings has stalled, and installation rates are now 5% of what they were in 2012<sup>28</sup>. If Greater Manchester is to meet its aims for reducing its CO<sub>2</sub> emissions, this situation needs to change quickly.

The SCATTER and ESME models provide only a theoretical implementation of measures rather than a practicable way of delivering them. An approach of staged implementation of the insulation measures put in place in the models would lead to incremental improvements in energy efficiency at the expense of holistic whole-house solutions. A whole-property or whole-house approach was a key recommendation in the *Each Home Counts*<sup>29</sup> review, commissioned by the government in 2015, and is being developed in standards for domestic retrofit (PAS2035<sup>30</sup> standard). Modelling<sup>31</sup> undertaken by the Centre for Sustainable Energy on behalf of the Committee on Climate Change suggests that policy should be designed to incentivise efficient long-term investments, rather than piecemeal or incremental change carried out without it being part of an overall retrofit plan for that home.

Together, this evidence points to the development and support of deeper retrofit through a holistic, whole-house approach – with measures carried out in one go or in stages as part of a property-level plan and including consideration of renewable energy generation and storage opportunities to reduce emissions. This approach also maximises the multiple cobenefits set out in section 2.1, in particular by improving comfort, ventilation and internal air quality, reducing energy bills significantly and reducing maintenance and refurbishment costs in the longer term.

#### 3.2.1.2 Examples of whole-house deeper retrofit

To date, whole-house approaches to deeper retrofit of domestic properties have been relatively limited – either in scale (i.e. limited to small numbers of homes) or in the diversity of the sources of funding they have attracted (i.e. relying on public rather than bringing in private investment). This is problematic given the scale of change required in Greater Manchester to deliver its aims for reducing CO<sub>2</sub> emissions and to maximise the co-benefits action on this scale will bring to its economy. Funding this level of change is also potentially more sustainable if a broader range of funding sources can be brought in to finance this investment.

However, several projects have taken or are currently taking place that have been important in demonstrating that levels of space heating demand and CO<sub>2</sub> emissions reductions of the scale needed can be achieved by taking a whole-house approach. In Greater Manchester, several past and current projects<sup>32</sup> have demonstrated that emissions reductions of the scale

25

<sup>&</sup>lt;sup>27</sup> https://www.gov.uk/government/statistical-data-sets/estimates-of-home-insulation-levels-in-great-britain

<sup>28</sup> http://www.theccc.org.uk/wp-content/uploads/2018/06/CCC-2018-Progress-Report-to-Parliament.pdf

https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/578749/Each\_Home\_Counts\_\_December\_2016\_.pdf

<sup>30</sup> https://standardsdevelopment.bsigroup.com/projects/2017-04146

<sup>31</sup> http://www.theccc.org.uk/wp-content/uploads/2014/11/CCC\_FinalReportOnFuelPoverty\_Nov20141.pdf

https://carbon.coop/portfolio/community-green-deal/; http://www.superhomes.org.uk; http://usir.salford.ac.uk/id/eprint/46328/; https://www.ecospheric.co.uk/zetland; https://retrofit.innovateuk.org/documents/1524978/2138994/Retrofit+Revealed+-

required can be made through deeper retrofitting of insulation measures. These have been undertaken using different approaches and therefore at different levels of cost. Other projects across the UK, such as Energiesprong in Nottingham have done likewise – this project is being supported European Regional Development Funding to support the retrofit of 150 homes to an "ultra-low carbon" standard.

#### 3.2.1.3 The current barriers to whole-house deeper retrofit

The barriers to whole-house deeper retrofit, both in Greater Manchester and across the UK, are not technical or geographical, rather scale-up is inhibited by issues of:

- Supply having a supply chain with sufficient skills and capacity (people) and the right products to deliver the scale required.
- Demand there being sufficient demand amongst owner-occupiers, social landlords and private landlords so that this scale-up can be realised.
- Intermediary support stimulating demand, linking that demand with the supply chain in more innovative ways (e.g. through a simplified service offer) and, at the same time, developing financial models and bringing to bear financial products to fund the high up-front capital costs currently associated with whole-house deeper retrofit.

These barriers are illustrated in the diagram below (Figure 8). These align with those set out in the government's call for evidence (and subsequent responses) on *Building a market for energy efficiency*<sup>33</sup>. The section below focusses on those areas where local influence can have the greatest impact. As government develops policy to respond to these barriers, it will be important for Greater Manchester to influence this, as well as adapting its approach in line with any new policy initiatives.

33 https://www.gov.uk/government/consultations/building-a-market-for-energy-efficiency-call-for-evidence

<sup>&</sup>lt;u>+The+Retrofit+for+the+Future+projects+-+data+analysis+report/280c0c45-57cc-4e75-b020-98052304f002;</u> https://www.procure-plus.com/case-studies/homes-as-energy-systems/

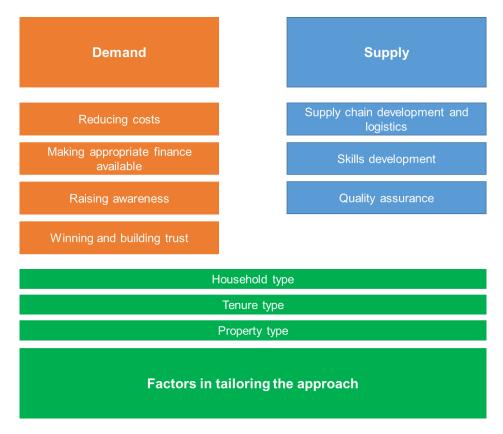


Figure 8 – Implementing a successful model for whole-house deeper retrofit

#### 1. Demand – influencing the decisions and behaviours of home owners

The level of works required at properties to deliver whole-house deeper retrofit are invariably more disruptive, complex and expensive to install than basic measures. This approach to and depth of retrofit is not generally considered by most homeowners, even during purchase or when planning significant renovation projects. The challenge of this scale of work is not the technical challenge of the measures installed, but about engaging, encouraging and incentivising tenants and homeowners to install these measures. At the same time, financial products are needed to provide ways of overcoming the high up-front capital costs of works of this scale – estimates generally place the minimum cost at this level of retrofit at around £40,000 per property<sup>34</sup>.

To do this requires a focus on the key areas below, which are mutually reinforcing rather than things to be seen in isolation. A recent BEIS-funded project<sup>35</sup> – "People Powered Retrofit" – piloted the creation of a local market for owner occupier retrofit at a neighbourhood scale including service design and delivery, local infrastructural development and supply chain development and quality assurance<sup>36</sup>. The £10.4m Homes as Energy Systems<sup>37</sup> (HaES) project, part-funded through ERDF, will also help tackle this issue by proving the benefits of energy efficient homes with small scale electricity generation and storage aggregated into virtual network.

<sup>34</sup> https://carbon.coop/2017/06/powering-down-together-community-green-deal/

<sup>35</sup> https://carbon.coop/2019/06/new-report-advocates-bottom-up-approach-to-retrofit/

http://carbon.coop/news/2018-12-06/people-powered-retrofit-householder-centred-approach-energy-efficiency

<sup>37</sup> https://www.procure-plus.com/case-studies/homes-as-energy-systems/

#### a. Reducing costs

Given the current high costs of the measures, focus needs to be placed on minimising costs. This can be tackled in two main ways:

- At the property level taking a whole house approach from the outset, rather than renovations of particular parts of the home (e.g. a bathroom or kitchen renovation) without due consideration of the whole home. This would allow homeowners to take better-informed decisions as well as facilitating the installation of wider measures at reduced cost due to wider enabling activity already being underway. The installation of micro-generation and storage and low carbon heating at the same time as extensive retrofit measures may also help improve cost-effectiveness, by allowing the homeowner to benefit from the Smart Export Guarantee and Renewable Heat Incentive respectively. The aggregating of flexible assets and stored energy at a group of properties could be sold to Distribution System Operator local flexibility markets or balancing markets to further increase revenue to participating homeowners and intermediaries. These issues are covered in more detail in Greater Manchester's Smart Energy Plan.
- Across groups of properties delivering at scale (across groups of property archetypes), developing packages of related measures, delivering economies of scale (e.g. through bulk purchasing) and upgrading tranches of properties together rather than on an individual basis. To enable this to be achieved, partnerships may be required between the public and private sector to bring together cohorts of properties to be retrofitted as part of a programme.

#### b. Making appropriate finance available

Even after reducing the overall costs, significant up-front capital will be required in order to fund whole-house deeper retrofit. Payback for these measures, in terms of energy bill savings, is likely to be over the long term. Therefore, appropriate finance is required to fund this. An approach that combines investment from the homeowner with public funding and private finance is most likely to be able to deliver these measures at scale.

- Homeowner investment given the scale of up-front capital costs, homeowners are only likely to invest in these measures if they have set aside significant funds for a renovation project or are able to release equity in their properties to fund the improvements (e.g. the HEEPS scheme in Scotland<sup>38</sup>) or access low interest loans (e.g. the Home Energy Loan Plan scheme in Manchester<sup>39</sup>).
- Investment in energy generation and storage investment in renewable energy generation, storage and low carbon heating at the same time as carrying out fabric improvements can bring co-benefits (e.g. reduced energy use which in turn is able to be met to a greater extent by renewable energy generated on-site; a better insulated building fabric which in turn makes the operation of a heat pump more efficient; carrying out works to a building's fabric and heating system at the same time). The Homes as Energy Systems<sup>40</sup> Project and Heat as a Service model<sup>41</sup> are both looking

<sup>38</sup> http://www.energysavingtrust.org.uk/scotland/grants-loans/heeps/heeps-equity-loan-scheme

<sup>39</sup> https://www.careandrepair-manchester.org.uk/manchester-services/hrst/the-home-energy-loan-plan/

<sup>40</sup> https://www.procure-plus.com/case-studies/homes-as-energy-systems/

<sup>41</sup> https://es.catapult.org.uk/news/ssh2-introduction-to-heat-as-a-service/

at tackling retrofit alongside issues of energy generation and storage and low carbon heating.

- Public funding there is currently no sufficiently targeted large scale public funding programme for energy efficiency measures of this scale and ambition in England.
   The Committee on Climate Change's 2018 report on progress for reducing emissions identifies the absence of concrete national policies to deliver and fund the scale of retrofit needed.
- Private finance attracting sources of long-term, low cost private finance is key but at present poses a significant challenge due to a number of factors including:
  - The perception of domestic retrofit as complex and risky which current projects are seeking to overcome (e.g. RetrofitWorks<sup>42</sup>).
  - o The need to have confidence in stable returns before entering the market.
  - The need to overcome barriers through de-risking investment e.g. by developing a track record in delivery, by attracting subsidies and revenue streams, by providing security (assets, income streams, subsidy) or by underwriting some of the risk.

While there is evidence of interest from institutional investors in retrofit, as yet there is no proven model against which to assign a credit rating and not enough critical mass of activity.

Mechanisms that can clawback the high upfront capital investment, through the recovery of uplifts in rents, value and tax revenue, are those most likely to succeed. This points to equity loans and green mortgages, alongside developing proposals for a revolving loan fund, being the most viable options to be explored further in Greater Manchester, whilst tailoring models to different parts of the market and scale<sup>43</sup> and working within government's policy development in this area<sup>44</sup>.

Government is also considering the potential use of price signals – which could include fiscal measures linked to EPC ratings – to help drive uptake. There is an opportunity consider how local taxation might be used as part of this approach.

Recommendation 3: The GMCA, key partners and investors should work together to develop commercially attractive business models for investment in retrofit of social and private housing. At the same time, GMCA, working with key partners and government (to consider this as part of national policy and green finance initiatives), should develop options for the potential use of council tax as a "nudge" to increase energy efficiency.

The significant up-front capital costs associated with whole-house deeper retrofit, the long-term nature of payback (in terms of energy bill reductions or realising value/rental uplift) and the current lack of proven financial models for providing returns on other benefits (e.g. of improved health) are barriers that need to be overcome in the development of business models that are attractive to investors. Investment will therefore need to come from patient capital, potentially including:

Equity loans – whether the GMCA or local authorities (or others) would develop an offer
to take an equity share in some domestic properties and use that stake to lend money to
the property owner for investment in whole-house deeper retrofit. An initiative such as

<sup>42</sup> http://retrofitworks.co.uk/

<sup>43</sup> https://shapuk.files.wordpress.com/2018/07/finance-models-for-retrofit-of-all-housing-tenures.pdf

<sup>44</sup> https://www.gov.uk/government/consultations/building-a-market-for-energy-efficiency-call-for-evidence

- this is already available to homeowners in parts of Scotland, run by the Scottish Government<sup>45</sup>.
- Other forms of loans whether there the GMCA or local authorities (or others) would establish a programme of loan funding (e.g. a revolving loan fund) to fund whole-house deeper retrofit at a large scale but for multiple recipients (homeowners).
- Green mortgages whether there are mechanisms that can be implemented locally, alongside the national level actions of lenders and national government, to increase the availability and uptake of green mortgages in Greater Manchester.

As a component of this approach, GMCA and local authorities should, in collaboration with government and key partners, develop an understanding of the potential use of council tax as a means of "nudging" homeowners to make energy efficiency improvements. Implementation of such an approach could strengthen the economic case for homeowners by increasing the potential payoff and decreasing payback times. In developing these proposals, the cost imposed would need to not be excessive but sufficient enough to provide a "nudge," whilst at the same time not impacting detrimentally on fuel poor households. Changes should also be set in a way that are cost-neutral for local authorities and Greater Manchester council taxpayers as a whole – with the level of discount for more energy efficient properties matching the surcharge against less energy efficient properties. Any proposals should be developed in collaboration with government, who have control over a wider range of fiscal measures available to achieve this (e.g. Stamp Duty).

#### c. <u>Increasing awareness of the opportunities of whole-house deeper retrofit</u>

Awareness amongst homeowners of the opportunities provided by whole-house deeper retrofit needs to be increased. At present, it is not generally part of people's decision making – this needs to change so that it becomes a natural part of the decision making process at key stages of the homeowner journey, particularly when homeowners are planning significant investment in renovating their home or in purchasing a new property.

Any efforts to increase awareness need to be supported by an understanding of decision-making, including the different contexts for decisions and the different sources of advice drawn upon and trusted (e.g. estate agents, mortgage providers, building firms, DIY chains).

Awareness could be strengthened by using price signals to reduce the purchase or running costs of more energy efficient properties, and/or vice versa for less energy efficient properties. This would provide a "nudge" to property owners to make improvements to their property. At present, there are no national or local benefits or disbenefits for owning, selling or leasing homes of different energy efficiency.

#### d. Winning and building trust

Trust amongst homeowners will need to be built in extensive retrofit measures. There are a variety of potential methods and approaches available to do this. Current projects, including HaES and RetrofitWorks will contribute to this area. Priorities include:

Agreeing expectations and delivering in line with them – delivering projects as agreed
with the homeowner and in line with the expectations set with them prior to the work
being carried out. This could be formalised through contracting and guarantees,

 $<sup>^{45}\</sup> https: \underline{//www.energysavingtrust.org.uk/scotland/grants-loans/heeps/heeps-equity-loan-scheme}$ 

- particularly guarantees around the energy performance of the building after the works have been carried out.
- Showing the benefits and sharing best practice communicating the benefits in a clear and meaningful way. This could be accompanied by highlighting and publicising individual success stories (e.g. through retrofit show homes) and aggregating individual, property-level benefits into a set of case studies (e.g. through retrofit show streets). Experience of projects has shown that working with social enterprises and Community Energy groups, who can act as trusted and respected intermediaries for awareness raising and delivery, is important in winning trust for this scale of retrofit.

This points to a broader focus than just traditional marketing campaigns, using community-based social marketing strategies to engage communities themselves in the marketing and delivery of programmes through, for example, community champions, tenant and resident groups and co-operatives.

Accreditation of suppliers and fitters, using robust and effective quality assurance frameworks informed by the PAS2035 standard, would also be a useful tool in this area. This could be formalised within the sector through the development of a local framework of trusted local suppliers, in order to increase confidence and trust in extensive retrofit measures (e.g. the RetrofitWorks project).

More broadly, communications will need to promote the wider case for whole house deeper retrofit, promoting it and its benefits broadly and over the long term, as part of the efforts across Greater Manchester to meet ambitions for reducing CO<sub>2</sub> emissions.

### 2. Supply – Ensuring the supply chain has the necessary skills and capacity to deliver measures at the necessary scale and quality

At the same time as stimulating and supporting a pipeline of demand, success is equally dependent on ensuring that the supply chain can support demand, building the sector in a sustainable way. Even where homeowners are aware of the opportunity of whole house deeper retrofit for their home, they will likely find it difficult to access advice and suppliers to carry out the work. The supply chain for retrofit will not develop without first seeing, real, evidenced demand emerge.

A systemic, coordinated and planned approach to enabling SME supply chain networks to grow, expand and develop within Greater Manchester is therefore required, which in turn:

- Creates enough certainty and confidence to support and sustain investment in capacity by bringing a sustained and consistent demand over the medium to long term.
- Diversifies and expands existing capacity, enabling the existing contractor base to exploit the high skill, high value, income streams within retrofit services.
- Ensures there is access to high quality products to deliver the standard required.
- Identifies and develops new products and services.

This points to an approach in which clients, who create demand, and suppliers are closely engaged on an ongoing basis, which will require coordination and planning between stakeholders rather than an approach which just leaves the market to develop.

Given the upskilling that whole-house deeper retrofit requires, <u>upskilling and building</u> <u>capacity</u> within the supply chain will be key. Greater Manchester's workforce requires support to do this by building upon the significant construction and the repair, maintenance

and improvement (RMI) sectors already in place in Greater Manchester, and also in those in site management and coordination roles. There are several themes to this upskilling and capacity building, including a focus on the following:

- Type of skills these will be required across the whole process of delivering retrofit from surveying and assessment of properties, to design installation, customer care and ongoing maintenance. There is a potential gap in on-site coordination, given the need for different types of work to be carried out at properties at the same time. There is significant potential in training up the existing Refurbishment, Maintenance and Improvement (RMI) sector given its size and scale in Greater Manchester.
- Quality assurance there have been concerns regarding the quality of retrofit carried out in certain cases, with some high-profile examples evident, particularly around dampness caused by the installation of wall insulation. The implementation of PAS2035 for standards in domestic retrofit is expected to lead to change and reduce the rate of failing installations at homes by providing a means of defining good practice standards for domestic retrofit.
- Engagement with young people and providers engagement with Sector Skills Councils, colleges and others will be needed so that this area appeals to a wider range of young people and to ensure a coordinated approach to training. More broadly, to meet its ambitions, Greater Manchester's young people need to be engaged and interested in this area before and as they make choices about their career. Apprenticeships with existing providers and contractors provide an opportunity to do this.

Skills amongst local authority planners are also important. Best practice, such as the implementation of an "Existing Dwellings Policy" for energy efficiency in Stockport<sup>46</sup>, should be rolled-out and built upon at a Greater Manchester scale.

Recommendation 4: The GMCA, learning and skills support agencies, providers, innovation hubs and existing trade bodies should come together to understand the future needs and opportunities presented by whole-house deep retrofit and develop packages of work to tackle the issues this identifies.

In addition, this needs to focus on:

- The different roles required, for example, retrofit coordinators, site managers and those carrying out the physical works on properties.
- How to increase demand for training through wider efforts to increase demand for retrofit amongst property owners (as above) and considering how to increase demand amongst individuals and businesses working in the construction and RMI sectors.

#### 3. Factors in tailoring the approach to overcoming these barriers

Approaches to overcome these barriers also needs to take into account the differences between households, in particular in the 3 following areas:

- a. Tenure type whether owner-occupied, social landlord or private landlord.
- b. Household type key characteristics that may make the household more or less likely to install extensive retrofit.

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<sup>46</sup> https://www.stockport.gov.uk/energy-efficiency-statements/energey-efficiency-information-requirements

c. Property type – the age and archetype of the property.

This is set out in greater detail below.

### Tenure type

Each sector of the housing market has different characteristics and will require a different approach to influence the decision making of home owners and tenants, whilst at the same time all contributing together to build up the supply chain (see section 2 below). These differences are due to the different type of incentives to act and the degree to which they impact, which result from the different ways and extent the benefits of retrofit (through uplifted value, reduced energy bills, increased comfort) apply in different tenure arrangements. There are also different national requirements for each sector. These, alongside the particular challenges for each sector, are set out in the table below and expand on the set of challenges in the previous section.

Tenure	Particular retrofit challenges	Relevant national policy	
Social housing – 22% of stock	The need for sufficient capital to be available and for social landlords to demonstrate a sufficient return on investment.	Decent Homes Standard <sup>47</sup> (currently under review and likely	
	Implementing different models to allow housing providers to benefit from bill savings (e.g. rent+bills or debt repayment models).  The need to consult tenants on improvements and new service charges	to be strengthened) Ambition for EPC Band C for homes in fuel poverty by 2030	
	Ensuring asset managers and maintenance staff have sufficient awareness and training to ensure retrofit improvements are carried out as part of ongoing maintenance or when properties are vacant		
	How to apportion costs to right to buy apartment occupiers		
Private rented – 17% of stock	Some benefits (energy bill savings, increased comfort) accrue to the tenants rather than landlord (uplift in value)	Private Rented Property minimum standard <sup>48</sup> requires any properties rented out to normally have a minimum energy performance rating of	
	Appetite to make longer term investment tends to be limited		
	Requirement to engage with both tenants and landlords adds complexity and increases drop out	EPC Band E (due to be updated in 2019 to introduce the	
	Capacity of Local Authorities to use available enforcement powers effectively	requirement for landlords to contribute to the cost	
	Diversity of sector and large number of small landlords to reach and engage with	of upgrades)	

https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/7812/138355.pdf
 https://www.gov.uk/government/publications/the-private-rented-property-minimum-standard-landlord-guidancedocuments

		Ambition for EPC Band C for homes in fuel poverty by 2030
Owner occupier – 66% of stock	Not fully aware of the potential opportunities and benefits offered by whole-house deeper retrofit	Ambition for EPC Band C for homes in fuel poverty by 2030
	Whole-house deeper retrofit not part of homeowner psyche and lack of price incentives to lead to improvements it on the scale required	
	Lack of access to finance to tackle high up front capital costs	
	The need to make retrofit easy, convenient, understandable and affordable	
	Working with communities to build trust, tailor marketing and increase take-up	
	High standards of customer care to build trust and manage disruption	
	Increasing local visibility of retrofit homes – to play the role of show homes	

The owner-occupier sector is the most challenging to tackle – in terms of its scale, age profile of owners and access to finance. Social landlords remain best-placed to build on existing good practice and continue to lead the way on decreasing energy demand across their properties, subject to working with others to tackle the barriers above. This could provide a means of developing the approach and supply chain. Good Landlord Schemes could be used to improve the performance of properties in the private rented sector, particularly if financial incentives/funding tools or easier access to retrofit solutions can be facilitated.

### b. Household type

Specifying and typifying the people who commission retrofit in the current market provides evidence on householders most likely to do so. In Greater Manchester, the *People Powered Retrofit* project used data from existing retrofit clients to examine those most likely to be early adopters of retrofit, who are as follows:

- Civic minded retirees
- Climate pragmatists
- Climate idealists
- Home improvers

This analysis was accompanied by a GIS mapping exercise, carried using a range of data sources to highlight location of those owner occupier householders most likely to take up services. This approach could be used to target future retrofit service offers in Greater Manchester and be built on and added to by others to create a city-region wide resource (e.g. using Mapping GM). This evidence also further justifies the need for wider communications about the benefits of and need to carry out whole house deeper retrofit.

### c. Property type

Knowing what needs to be done to each home will be fundamental and is influenced by form, age and location of homes across Greater Manchester. All districts within Greater Manchester have a wide range of property ages, with Manchester and Salford having the greatest proportion of new builds. Figure 9 shows the energy efficiency (in terms of EPC ratings) of Greater Manchester properties by property age.

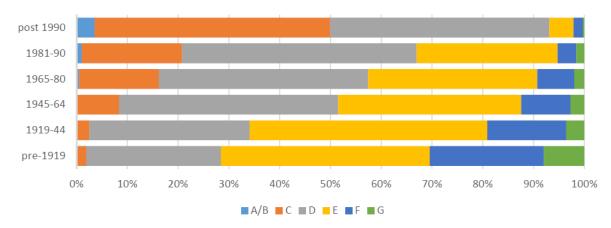


Figure 9 – Energy performance (EPC ratings) of Greater Manchester properties by age

Source: Greater Manchester Spatial Energy Plan

Different types of homes will require different packages of measures to be installed – these would best be developed as part of a "pattern book" of best practices, specifications and details that could be shared across the supply chain and updated over time to support its development. Work is already underway in Greater Manchester to develop a pattern book<sup>49</sup> of packages of measures, informed by modelling of the most common housing archetypes in the city region and measures that can be applied to them to maximise energy efficiency.

### 3.2.1.4 Tackling the supply and demand side barriers together

At present, there is a lack of coordinated action and support to tackle these barriers together – supporting an increase in awareness and demand among people likely or wanting to retrofit their homes and linking this up with a supply chain of sufficient capacity and capability to deliver whole-house deeper retrofit at the scale needed. A local approach is in line with the direction of government policy in this area, where different local markets and solutions have been tested through 6 pilot projects<sup>50</sup> across England (including in Greater Manchester, led by the Carbon Co-op and URBED<sup>51</sup>).

Recommendation 5: Partners across Greater Manchester should collaborate to develop a delivery model to build up local markets for whole-house deeper retrofit. This should build on and learn from the findings of recent work in this area, including government funded pilots like People Powered Retrofit and RetrofitWorks, as well as previous programmes like Green Deal Communities.

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<sup>49</sup> https://retrofit.support/

<sup>&</sup>lt;sup>50</sup> https://www.gov.uk/government/publications/energy-efficiency-improvement-rates-local-supply-chain-demonstration-projects/local-supply-chain-demonstration-projects-summaries

<sup>&</sup>lt;sup>51</sup> https://carbon.coop/2018/12/what-does-peoplepowered-retrofit-look-like/

There are several demand and supply side issues that need to be tackled together in a coordinated way in order to upscale whole-house deeper retrofit. Tackling these also needs to be supported by a delivery model that can increase demand and match that with a supply chain that has the capacity and capability to meet that demand.

Several projects, including the recently BEIS-funded pilots, have identified the need to develop local delivery models that can:

- Target those most likely to retrofit identify early adopters and the household and neighbourhood types where these people are most likely to live.
- Build awareness in these neighbourhoods using tools such as open homes and social marketing and community-based groups to put whole-house deep retrofit on people's radars and turn awareness into demand.
- Build up the supply chain improving the capability of the supply chain, providing a means for referring retrofit clients to suppliers.
- Providing a smooth customer journey providing support to homeowners throughout the process and works in an end to end service.

The following delivery models should be explored as part of this:

- Local authority-led approach, drawing on learning from group work improvements contracts and schemes such as the Home Energy Efficiency Programmes for Scotland (HEEPS).
- The use of a trusted community or co-operative-led intermediary to facilitate works across a collection of homes, tendering packages of homes and building a supply chain, e.g. People Powered Retrofit.
- The use of an Aggregator/Energy Services Company model, combining delivery of retrofit improvements with the installation and management of flexible load technologies and the sale of local flexibility and other grid services, e.g. HaES, OpenDSR
- The development of Pay As You Save owner occupier retrofit service offers.
- The development of social housing-led retrofit investment vehicles or projects to extend in to owner occupier households, broadening the benefit of provider procurement channels.

#### 4. COMMERCIAL BUILDINGS

#### 4.1 WHERE DOES GREATER MANCHESTER NEED TO GET TO?

### 4.1.1 Priorities for increasing energy efficiency in commercial buildings

For commercial buildings, the challenges and underpinning evidence set out in section 2.4.2 points to the following priority in improving their energy efficiency:

1. Reducing the demand for energy, particularly space heating, in Greater Manchester's commercial buildings.

In order to do this, action needs to be taken to:

- Increase measurement and reporting of energy use in commercial buildings.
- As a result of that increased measurement and reporting, reduce energy use.

### 4.2 WHERE IS GREATER MANCHESTER NOW AND WHAT ACTION IS NEEDED OVER THE NEXT 5 YEARS?

### 4.2.1 Measuring and reporting on the operational energy performance

Several requirements exist for the measurement and reporting of energy use in commercial buildings, including:

- The Streamlined Energy and Carbon Reporting (SECR)<sup>52</sup> policy, which requires around 12,000 businesses across the UK (including all quoted companies and "large" unquoted companies) to report on their energy use.
- The Energy Savings Opportunity Scheme (ESOS)<sup>53</sup> places requirements on businesses to report on energy use, but this is only required of "large" businesses and every 4 years.

However, these requirements are mostly limited to larger companies, meaning that the majority small and medium sized businesses are not legally required to report on their energy use. Although there may be incentives to measure and report (e.g. to target improvement measures or through supply chain requirements), there are also often practical difficulties in doing so, including:

- The ability to measure energy usage in some buildings, such as commercial office buildings with multiple tenants, metered data is often not available per unit.
- The need to make reporting meaningful taking raw energy use data and accounting for factors beyond a building's fabric, including operational hours, type of occupiers and age/type of energy/heating systems to provide a measure of its operational energy performance.

This situation generally means that there is a lack of specific data on the operational energy performance of commercial buildings in the UK, including in Greater Manchester. Action is needed at a national level to address this issue – however, planning policy provides a potential local means of tackling it.

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<sup>&</sup>lt;sup>52</sup> https://www.carbontrust.com/news/2019/04/secr-uk-business-streamlined-energy-carbon-reporting-framework/

<sup>53</sup> https://www.gov.uk/guidance/energy-savings-opportunity-scheme-esos

Recommendation 6: The GMCA and local authorities should explore the potential for introducing requirements for new developments to report on operational energy performance, and as part of that, on space heating demand.

In order to begin to mainstream the measurement and reporting of operational energy performance, there is a potential opportunity to introduce requirements for new developments through planning policy. For example the New London Plan draft for consultation proposes requirements for major development to monitor and report on energy performance (e.g. through a DEC) for at least 5 years via an online portal. Given the scale of current and planned commercial development in Greater Manchester, this could provide a means of upscaling the amount of commercial floorspace for which operational energy performance is measured and reported which would begin to build this as an approach that could be adopted for existing buildings.

The data currently available and which provides an indication of the energy efficiency of Greater Manchester's commercial buildings is set out below.

### At the building level:

Greater Manchester's commercial buildings vary significantly in type, use and age – from offices in new blocks or older listed buildings, to factories, warehouses, industrial units and retail and leisure space. The sector is significantly more varied than the domestic stock, where more common archetypes of properties exist.

As with domestic properties, EPCs are available for commercial buildings and are generated when they are constructed, sold or leased. However, in addition to the limitations set out in section 3.1.3, there are additional issues with using them as an indicator of energy efficiency in commercial buildings as they are not representative of how they perform during operation. This varies significantly from the theoretical rating in the EPC and is dependent on how the building is used and occupied.

This lack of data is compounded by a variety of wider factors, including:

- Sparse and inconsistent data about the energy performance of these properties.
- The wide variety of construction methods.
- Multiple uses and constant change of use.
- Absence of price signals or legal requirements to measure or report on the energy efficiency of commercial buildings.
- Metering arrangements, particularly in large, multi-tenanted buildings.

### At a spatial level:

At a spatial rather than building level, available evidence points to the areas of the city-region that have the highest commercial heat demand. Figure 10 – a map of commercial heat density across Greater Manchester – shows the highest commercial heat demand is aligned with the density of Greater Manchester's city and town centres. Manchester city centre and Trafford Park have the largest area of heat density – most areas have heat density of around 100kWh/m², with Manchester city centre's demand over 140kWh/m². Areas of the highest demand provide the greatest potential for realising the greatest reductions in CO₂ emissions and realisation of co-benefits for productivity.

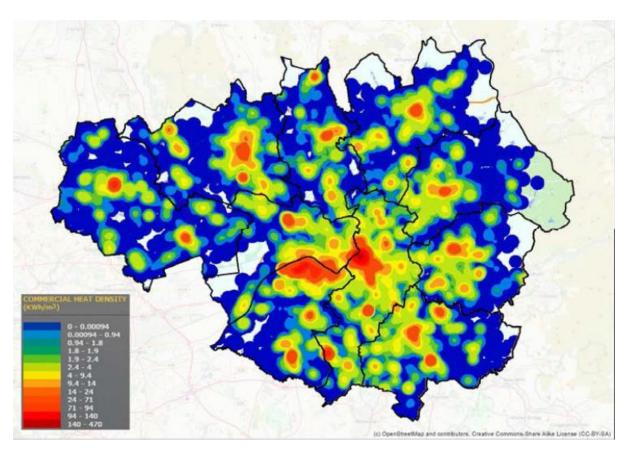


Figure 10 – Spatial heat demand across Greater Manchester

Source: Greater Manchester Spatial Energy Plan

### At a sectoral level:

Evidence is also available for the commercial sectors in which heat demand is the highest. Excluding heat used in transport (public buildings), these are as follows:

- Industrial 25%
- Retail 25%
- Commercial offices 12%
- Hotels 10%

The heat demand under "industrial" above goes beyond that of space heating in buildings and into industrial processes (to be covered in the separate Sustainable Consumption and Production Plan for Greater Manchester). This varies depending on the exact nature of the products and processes involved. Retail, commercial offices and hotels therefore provide the greatest potential for reducing space heating demand in commercial buildings.

### 4.2.2 Reducing energy use by improving operational energy performance

At present, there is no widespread requirement for businesses to improve the operational energy performance of their premises. Incentives do exist, in the form of cost savings in reduced energy bills if these directly benefit the business (i.e. they pay the energy bills directly or, if they do not, savings are passed on through charges from landlords). However, for tenanted commercial property, there is a significant issue over who pays and who sees

the benefit of that investment (e.g. landlords investing in a tenant's space may not see a return on that investment if there is not a market for more energy efficient property; conversely, tenants investing may not be in the space long enough to see a return on that investment). There is generally an absence of demand for more energy efficient commercial buildings that would incentivise investment from property owners or occupiers.

Nationally, requirements are in place relating to EPCs which, as set out above, have limitations in their interpretation as a proxy for operational energy performance. For businesses that rent their premises from a private landlord and either move premises or enter into a new tenancy at their existing premises, the landlord cannot be able to rent out a property with an EPC rating of F or G. From 1 April 2023, this will apply to all properties, even if businesses have not moved or entered into a new tenancy agreement. This will serve to increase the theoretical efficiency of Greater Manchester's rented commercial premises but will not tackle operational energy performance given the methodology underpinning the production of an EPC.

### 4.2.3 Setting a pathway for improving operational energy performance

At present, the measurement, reporting and improvement of operational energy performance in commercial buildings in Greater Manchester is not sufficiently valued or incentivised in business' decision making to achieve the required level of reductions in the CO<sub>2</sub> emissions associated with their energy use. A phased approach is needed to change this, recognising that there are limited local levers that can immediately be implemented to change this.

Recommendation 7: Working with key partners, GMCA should develop and implement a pathway to lead to an increase in the measurement, reporting and improvement of energy efficiency in commercial buildings, and as part of that, on space heating demand.

The market for more energy efficiency commercial buildings needs to be developed in Greater Manchester. In the short term, this will need to rely on a voluntary approach but will require "nudge" incentives/disincentives or legislative requirements to deliver the required shift. A proposed pathway for achieving this is set out below.

### 1. Year 1 – Focussing on a voluntary approach and developing policy proposals

a. Developing a voluntary approach:

GMCA and partners' activity should focus in the following areas:

- Measurement working with businesses to increase uptake of measures of operational energy performance. This could use existing methodologies – such as DECs.
- Reporting working with businesses to report this measurement in a standardised way, for example at premises, to customers or clients, through trade bodies (to increase scale) or online (e.g. through an online portal).
- <u>Improvement</u> working with businesses to encourage commitments to improve operational energy performance. This could be led by Greater Manchester's largest businesses or most significant emitters of CO<sub>2</sub> and its largest commercial landlords. The public sector and large businesses could make commitments to improve the energy efficiency of its buildings for example, setting a date beyond which they will only occupy buildings that can meet certain standards of operational energy performance.

To have the greatest potential impact, these efforts should focus on:

- Those organisation with the greatest CO<sub>2</sub> emissions that arise from the heating of their buildings. This could build on the approach being taken in Manchester by the Manchester Climate Agency to work with 10 organisations responsible for over 20% of CO<sub>2</sub> emissions in Manchester.
- Those areas of the city region with the highest spatial heat demand, drawing on mapping work which identifies the city centre, Trafford Park, Salford Quays and cityregion town centres as the most significant areas of emissions.
- Those sectors responsible for the greatest proportion of CO<sub>2</sub> emissions within Greater Manchester industrial, retail, commercial offices and hotels. Collaboration within key businesses in these sectors (as has occurred in the hospitality sector on single use plastics) could help drive this at scale.

### b. Developing policy proposals

At the same time, the GMCA and key partners should develop policy proposals that would support strengthening this approach and move beyond voluntary initiatives alone. As local levers are limited to those areas below, this work should be in collaboration with government policy development on price signals to "nudge" the behaviour of businesses and the energy efficiency of their premises. This work should focus on:

- Developing options for the potential use of business rates as a "nudge" to increase energy efficiency. This could be implemented according to the same principles set out in Recommendation 3.
- Driving change through costing carbon into public procurement.
- The development of more sophisticated standards against which local businesses could measure their operational efficiency. This would not mean the GMCA developing and setting Greater Manchester-only standards, but potentially involve the promotion or adoption of other standards. As an example, this could include positioning Greater Manchester as a potential early adopter or pilot area for the adaptation of the NABERS<sup>54</sup> standard. This has been developed and implemented in Australia to measure and compare the environmental performance of buildings and tenancies. Alternatively, priority sectors could also be encouraged to develop their own specific standards e.g. specific measures of the operational efficiency of hotels and retail space.

### 2. Years 2-3 – Piloting policy proposals, whilst continuing to expand a voluntary approach

Focus will need to switch away from a voluntary approach to piloting the policy proposals set out above. These could be piloted within particular areas of the city region or within particular sectors.

### 3. Year 4-5: Implementation of policy proposals

Depending on piloting, these proposals could then be rolled out more widely across the city-region.

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<sup>54</sup> https://www.nabers.gov.au/

#### 5. PUBLIC BUILDINGS

#### 5.1 WHERE DOES GREATER MANCHESTER NEED TO GET TO?

### 5.1.1 Priorities for increasing energy efficiency in commercial buildings

For public buildings, the challenges and underpinning evidence set out in section 2.4.2 points to the following priority in improving their energy efficiency:

1. Reducing the demand for space heating in Greater Manchester's public buildings.

### 5.2 WHERE IS GREATER MANCHESTER NOW AND WHAT ACTION IS NEEDED OVER THE NEXT 5 YEARS?

### 5.2.1 Measuring and reporting on the operational energy performance of public buildings

Like Greater Manchester's commercial buildings, its public buildings also vary. However, they can be more easily segmented into key categories allowing a degree of comparison within these groups. The most significant of these are as follows:

- Schools (maintained schools and academies)
- Further education and higher education institutes
- Emergency services (fire and police)
- Hospitals and health care facilities (NHS)
- Leisure facilities (e.g. sports centres)
- Cultural facilities (e.g. museums and libraries)
- Offices

More information is available regarding the operational energy performance of public buildings than it is for commercial buildings. Public buildings with a total useful floor area over 250m² and which are frequently visited by the public are required to obtain and display a Display Energy Certificate (DEC) at the building. DECs provide an energy rating of the building from A (most efficient) to G (lease efficient) and are accompanied by a valid advisory report, containing recommendations for improving the energy performance of the building.

Where the building has a total useful floor area of more than 1000m², the DEC is valid for 12 months and the accompanying advisory report is valid for seven years. Where the building has a total useful floor area of between 250m² and 1000m², the DEC and advisory report are valid for 10 years. DECs therefore provide a more up to date assessment of the energy performance of larger public buildings – those for smaller public buildings are more likely to be out of date (and could be out of date by as much as a decade).

At present, the best available data on DECs is that accessible online through government datasets<sup>55</sup>. This has some limitations in that the data is out of date (currently by 2 years) and DECs are broader measures of a building's energy use, rather than just its energy efficiency.

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<sup>&</sup>lt;sup>55</sup> https://data.gov.uk/dataset/e7868e93-3cc5-4eb5-80ff-139001504219/display-energy-certificate-data

Recommendation 8: The GMCA, local authorities and the public sector across Greater Manchester should ensure standardised measurement and annual reporting (as part of reporting against the 5 Year Environment Plan) on the energy efficiency of their buildings, including their Display Energy Certificate ratings and a measure of space heating demand.

The public sector in Greater Manchester (particularly the GMCA, local authorities and the organisations within the Greater Manchester Health and Social Care Partnership) should work together to tackle the following in this area, which will bring the following benefits:

- Increasing capacity to overcome the issue of a lack of capacity, particularly within Local Authorities, to dedicate to this issue.
- Sharing expertise different organisations are likely to bring different areas of expertise to tackling this issue.
- Efficiencies of scale there are likely to be efficiencies in improving energy efficiency across a larger estate.

### 5.2.2 Improving the efficiency of Greater Manchester's existing public buildings

At present, there is no requirement for the public sector to improve the operational efficiency of the premises they own and/or occupy. Incentives do exist, in the form of cost savings in reduced energy bills if these directly benefit the organisation (i.e. they pay the energy bills directly or, if they do not, savings are passed on through charges from landlords).

Nationally, requirements are in place relating to EPCs which, for non-domestic buildings, are indicators of the theoretical efficiency of a building rather than in use. For public sector organisations that rent premises from a private landlord and either move premises or enter into a new tenancy at their existing premises, the landlord will not be able to rent out a property with an EPC rating of F or G. From 1 April 2023, this will apply to all properties, even if businesses have not moved or entered into a new tenancy agreement. As with commercial buildings, this will serve to increase the theoretical efficiency of Greater Manchester's rented public buildings but will not tackle operational efficiency.

Recommendation 9: The GMCA and local authorities should work to deliver agreed targets for the energy efficiency of their buildings, including their Display Energy Certificate ratings and developing a measure and targets for space heating demand, and encourage other public sector organisations to do likewise.

The Greater Manchester 5 Year Environment Plan sets out a target for average DEC ratings to achieve across GMCA and local authority buildings by 2024, where economically viable. This could be expanded, including a commitment to end leases of buildings that do not meet this target (where economically viable and where leases allow).

As well as wider reporting, Greater Manchester's public sector organisations should also commit to meeting and reporting annually against the government's voluntary targets on carbon emissions reductions (30% by 2020/21 on a 2009/10 baseline<sup>56</sup>) and any subsequent target set after that. Although this encompasses activities beyond the energy used to heat public buildings, this should be a focus for action.

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<sup>&</sup>lt;sup>56</sup> https://www.gov.uk/government/publications/emissions-reduction-pledge-2020-emissions-reporting-in-public-and-higher-education-sectors

#### 6. BRINGING IT TOGETHER

#### 6.1 WHERE DOES GREATER MANCHESTER NEED TO GET TO?

### 6.1.1 Mission-oriented approach

The 5 Year Environment Plan for Greater Manchester sets out the scale of the challenge in achieving the CO<sub>2</sub> emissions reductions required to meet its international climate change obligations, of which increasing building energy efficiency is an integral part. In order to deliver its environmental vision and aims the plan sets out and to close the gap between what is needed and where Greater Manchester is now. To do that in points to taking new and different approaches in the following areas:

- Supporting innovation
- Finance and funding
- Building partnerships between the public, private and voluntary, community and social enterprise organisations
- Showing leadership
- Engaging and educating residents, communities and businesses
- Upskilling its workforce

In this report, these themes are key to tackling the challenges associated with decarbonising Greater Manchester's buildings and have been covered in various sections and recommendations.

To bring all these areas together and effectively implement its aims, the 5 Year Environment Plan sets out the desire to establish a mission-oriented approach to tackling Greater Manchester's environmental challenges. This approach involves defining a challenge and then uses this to create an ambitious goal and create a long-term policy landscape, setting out tasks that mobilise various actors to come together in new ways, rather than within traditional sectors or groups. This points to establishing new ways of working within Greater Manchester – across the public, private and voluntary, community and social enterprise sectors – to achieve the aims set out in the 5 Year Plan and in implementing the recommendations in this report.

### 6.2 WHERE IS GREATER MANCHESTER NOW AND WHAT ACTION IS NEEDED?

### 6.2.1 The roles of different organisations within Greater Manchester

No single organisation in Greater Manchester can tackle the priorities and implement the recommendations in this report alone. Doing so requires joint working across different types of organisations and sectors, which should build upon the strength of existing partnerships in Greater Manchester. These have been developed strategically, for example in the lead up to the 2018 and 2019 Green Summits and in the development of the 5 Year Environment Plan, and around particular projects, for example the Homes as Energy Systems ERDF-funded project. Each sector brings different abilities and expertise – these are set out below:

- GMCA and Local Authorities – providing the right policy framework, including setting ambition and direction, providing evidence to inform action and implementing policy where levers are held locally (e.g. local taxation, planning policy); convening key stakeholders and engaging more widely across Greater Manchester.

- Wider public sector leading by example in areas where organisations (GMCA, Local Authorities, health, national government etc) have direct operation and financial control (e.g. assets, procurement).
- Community, voluntary and campaign sector groups building greater public
  understanding and awareness of energy efficiency and low carbon buildings. There is
  the potential to participate in broad information campaigns and in more innovative
  community-based social marketing activity and to act as trusted advisors and
  advocates, signposting opportunities and sources of information.
- Social Enterprises and co-operatives developing the sector through trading activity
  that brings wider social and environmental benefits in areas, activities include supply
  chain training schemes that offer a route in to work for marginalised elements of the
  workforce or the co-design of new retrofit service delivery models.
- Businesses (within the sector) offering apprenticeships and training schemes as a route into work for new entrants, carrying out innovative research and development, developing new supply chains and business diversification
- Businesses (all) raising awareness and offering incentives/schemes for domestic retrofit amongst their employees.

### 6.2.2 Building on existing partnerships to work together in new ways

GMCA and key partners need to build on this foundation and move to focus on delivery against the priorities set out in the 5 Year Environment Plan and within this report. This should be done in a way that reflects the ambition for a mission-oriented approach and links to other Greater Manchester strategies, particularly the Local Industrial Strategy and Infrastructure Framework.

Recommendation 10: The GMCA should put in place a Greater Manchester Low Carbon Buildings Challenge Group, which, through establishing specific task and finish groups, would provide cross-sector approach to tackling the systemic challenges associated with retrofit across all building types. The GMCA should put in place a Greater Manchester Low Carbon Buildings Challenge Group, which, through establishing specific task and finish groups, would provide cross-sector approach to tackling the systemic challenges associated with retrofit across all building types.

The following section (including Figure 11) sets out a proposed structure for how a Retrofit Challenge Group would work. These areas are discussed in further detail below.

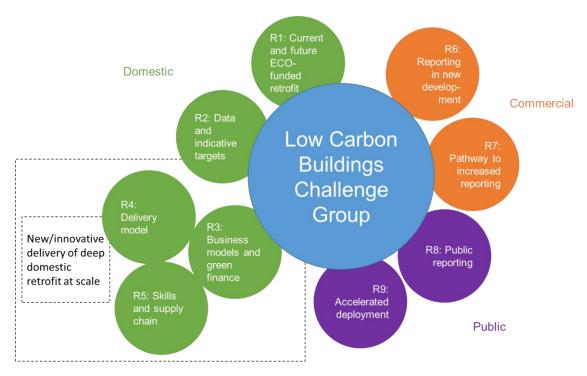


Figure 11 – Potential model for a Greater Manchester Retrofit Challenge Group

The Retrofit Challenge Group should be responsible for driving progress towards the ambitions for buildings set out in this report and the 5 Year Environment Plan. In order to do this across the aims of the 5 Year Environment Plan through a mission-oriented approach, the Greater Manchester Combined Authority put in place new arrangements for how the implementation and delivery of the 5 Year Environment Plan is governed and progressed. This is being implemented in a way that reflects the interdependencies between different areas. For decarbonising buildings, this will include looking at reducing energy demand, decarbonising energy supply and decarbonising travel (through supporting electric vehicle roll-out) at the level of domestic, commercial and public buildings.

In line with the mission-oriented approach set out in the 5-Year Environment Plan, it is recommended that the Retrofit Challenge Group and Task and Finish Groups beneath it are:

- Action-focussed focussed on implementation and delivery, driving forward the recommendations in this report rather than focussing on or discussing issues or barriers.
- Agile should not necessarily be long-standing and should be able to change their remit and focus to ensure the most significant issues are prioritised given limited resources.
- Cross-sectoral approaching issues in a way that allows for them to be tackled bottomup most effectively rather than on traditional top-down sectoral lines

Given the different issues that need to be tackled in different building types set out in this report, different approaches and actions will be required for each. Even within these building types, different approaches may be required for:

- Domestic properties social housing, the private rented sector and owner occupiers.
- Commercial properties offices, retail, tourism/leisure.
- Public buildings schools, healthcare.

The structure proposed above should allow for actions and experience to be shared across building types depending on relative priorities and cross-over. The list below sets out an initial set of potential areas of cross-over between building types:

- Communications and marketing raising increasing awareness among key groups (e.g. home owners, SMEs, commercial landlords, public estates managers).
- Standards, measurement and performance refining the standards that retrofit across building types can feasibly meet in order to meet Greater Manchester's ambitions and measuring and reporting on progress and performance to meeting these.
- Policy, implementation, research developing local policy initiatives and working with national government where it holds the relevant levers; implementation through training, pilots, campaigns; further developing the evidence base, through commissioning research and bringing this together (e.g. on Mapping GM).
- Finance developing proposals and models for financing retrofit, including liaising with potential investors on financial products. .
- Skills and sector development engaging with providers and other stakeholders within the education system to promote the sector, whilst also working with the sector and supply chain to identify issues and barriers.

#### 6.2.3 Next steps

Working across organisations in the way set out above offers the potential for stakeholders to come together in new ways to deliver on the ambitions for low carbon buildings set out in this report and the 5 Year Environment Plan for Greater Manchester. The Retrofit Challenge Group should be established as soon as possible to drive action in this area forward. Within that, tackling the key barriers to domestic retrofit and developing innovative public, private and third sector partnerships to do that should be the key priority.





# 5 YEAR **ENVIRONMENT PLAN**











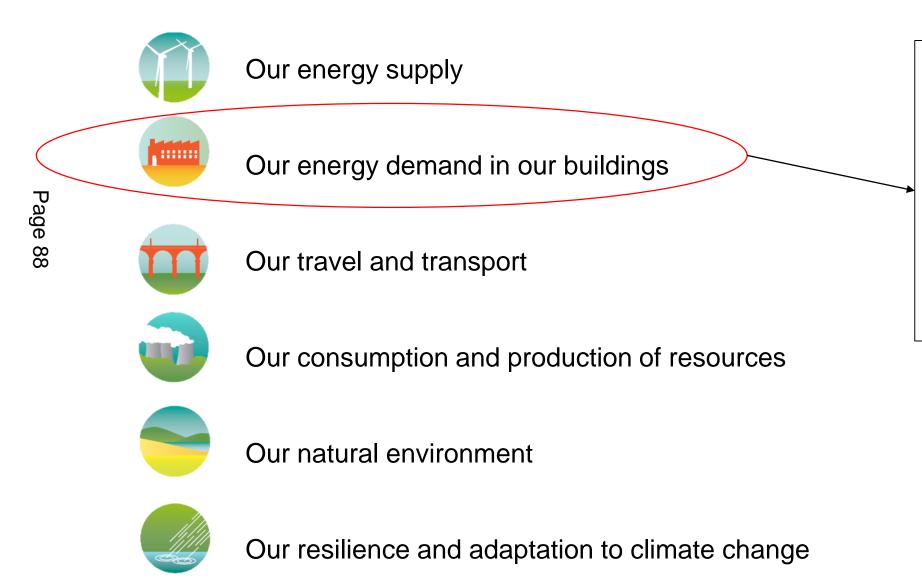






### **Priority areas in the 5 Year Environment Plan**



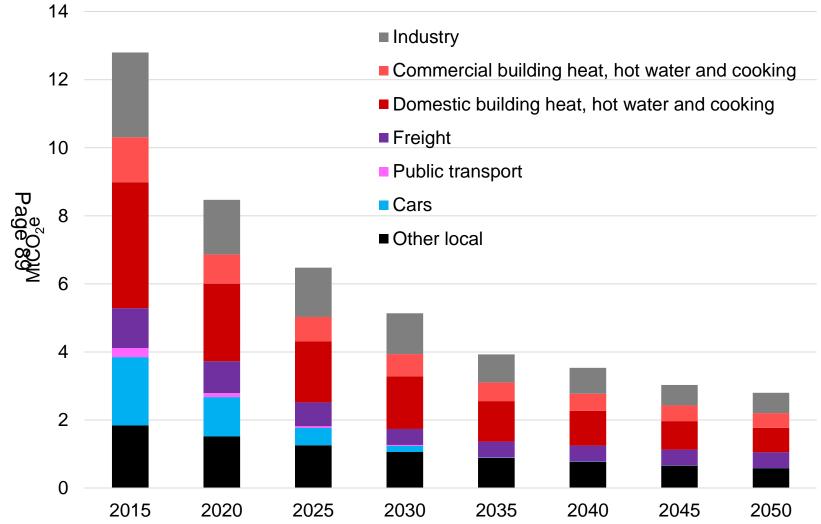


Scope:

- Existing buildings not new build
- Heating rather than appliances, lighting, active cooling
- Different types of buildings: homes, commercial, public







### The scale of the challenge in achieving those reductions

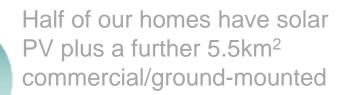


Key assumptions about now to 2040 in the SCATTER GM model



All cars on our roads are zero emissions (tailpipe) by 2035

Page 90



Gas accounts for less than 35% of heating supply



Industrial emissions reduce by 50-75%



61,000 homes a year are retrofitted, reducing "thermal leakiness" by 57%

Commercial heating demand drops by over 20%



3m trees are planted by 2035

### The wider opportunity and the need to take action

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### **Economic**

Increased productivity

Businesses more attractive to employees

Social Skills and growth opportunity

Improved health Meeting our carbon ambitions

Lower fuel bills

### Reducing energy demand in homes



### **Challenges:**

1. Increasing levels of fuel poverty across GM

Page 92

2. Scale of upscaling retrofit extent and depth

### Where are we now:

- 1. Current national ECO funding not delivering enough
- 2. Pilots/small programmes in100s; barriers of:
- High up-front costs and need for patient finance.
- Lack of supply chain capacity and capability.
- Lack of demand and straightforward customer journey.

### What do we need to do (Recommendations)

- 1. Develop proposals for and push for changes to current the current ECO framework when it ends in 2022 to better align it with the city-region's ambitions.
- 2. Further research to identify appropriate space heating demand targets for different property types to inform action
- 3. Develop business models for investment including proposals for equity loans and how price signals (e.g. council tax) might be used as a "nudge"
- 4. Understand future skills needs and opportunities and develop packages of work to tackle these issues
- 5. Develop delivery models to build up local markets building on recent work in this area.

### Reducing energy demand in commercial buildings



### **Challenges**:

1. Reducing energy demand, driven by increased measurement and reporting.

# Where are we now:

1. Lack of requirements or incentives for measurement and reporting of operational energy performance

2. Lack of requirements or incentives for improving operational energy performance

### What do we need to do (Recommendations):

1. Investigate Building measurement and reporting into new developments using the planning system

2. Develop a pathway for embedding measurement and reporting for commercial building heat demand, starting with voluntary reporting whilst looking at ways to encourage this (via nudge)

### Reducing energy demand in public buildings



### **Challenges:**

1.2 Reducing erergy demand in public buildings.

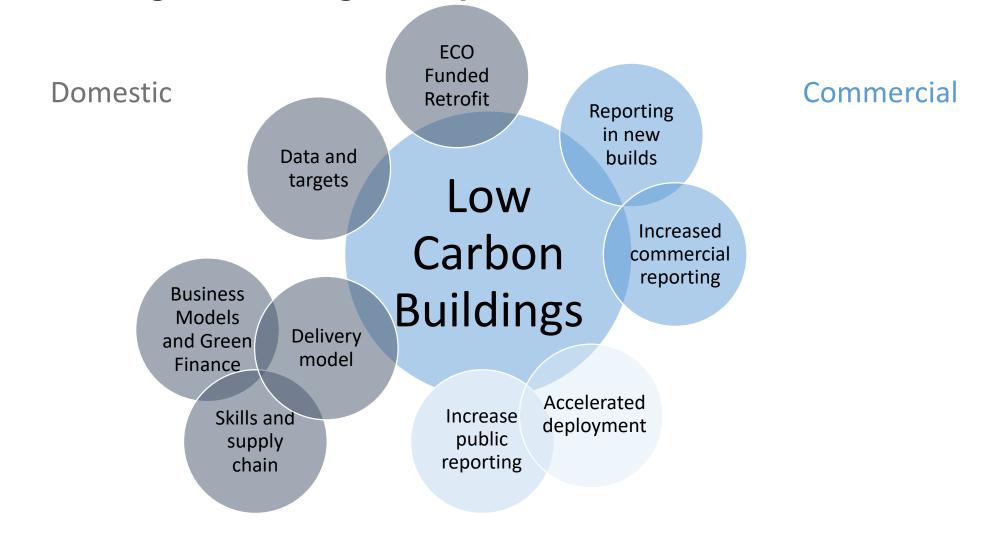
## Where are we now:

- 1. Lack of consistent reporting across public sector
- 2. Lack of coordinated action to work to agreed targets

### What do we need to do:

- 1. Standardised measurement and annual reporting across the public sector
- 2. GMCA and LAs work to agreed targets for the energy efficiency of their buildings, including their Display Energy Certificate ratings and developing a measure and targets for space heating demand, and encourage other public sector organisations to do likewise.

### Low Carbon Buildings – Challenge Group and Potential Task and Finish Groups



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### Housing, Planning and Environment Overview and Scrutiny Committee

Date: 23<sup>rd</sup> September 2019

Subject: Household Waste Recycling Centre Access Policy

Report of: Eamonn Boylan, Portfolio Lead Chief Executive for Green Cities

#### **PURPOSE OF REPORT**

This report sets out the current measures that are used to deter trade waste abuse at the Household Waste Recycling Centres (HWRCs), provides details of schemes in operation elsewhere and proposes a policy for enhanced measures and a timetable for implementation.

#### **RECOMMENDATIONS:**

a) Note the proposed approach set out at sections 4.0 and 5.0.

#### **CONTACT OFFICERS:**

David Taylor, Executive Director Waste and Resources Team

Email: david.taylor@greatermanchester-ca.gov.uk

Risk Management – see paragraph 8.0

Legal Considerations – see paragraph 6.0

Financial Consequences – Revenue – see paragraph 7.0

Financial Consequences – Capital – N/A

Number of attachments included in the report: 4

BOLTON MANCHESTER OLDHAM SALFORD TAMESIDE WIGAN Page 97

### **BACKGROUND PAPERS:**

TRACKING/PROCESS				
Does this report relate to a major strategic decision, as set out in the		the	Yes <del>/ No</del>	
GMCA Constitution				
EXEMPTION FROM CALL IN				
Are there any aspects in this rep	ort which			
means it should be considered to be exempt				
from call in by the relevant Scru	tiny Committee			
on the grounds of urgency?				
TfGMC	Overview & Scr	utiny		
	Committee			
	12 September 2019			



#### 1.0 INTRODUCTION

- 1.1 As part of the contract specification for Lots 1 and 2 in the recent GM waste procurement, GMCA stipulated that the successful contractor must have robust trade waste prevention measures in place at the Household Waste Recycling Centers (HWRCs). This is in response to the apparent levels of trade waste inputs being received across the Household Waste Recycling Centre (HWRC) network which is increasing tonnages received and pushing up costs. Trade waste should not be deposited at these sites, the traders should be complying with their legal obligations and duty of care and paying for disposal. The level of trade throughputs cannot be quantified in tonnage terms as none of the sites have weighbridges for recording incoming vehicle weights. However, visual checks on the number of small vans as well as use of Automatic Number Plate Recognition (ANPR) systems to track repeat visitors indicates that there is abuse occurring on a regular basis that is estimated equate to c. 10% of the 300 ktpa throughput across the network of sites.
- 1.2 In order to address this level of input, as well as the Lot 1 and Lot 2 contractor control measures proposed by Suez Recycling and Recovery UK (Suez), GMCA will require a set of policy measures to support Suez and access control measures. This report sets out the background to existing arrangements, examples of local authority arrangements in operation elsewhere and proposals for control measures at GMCA sites to be operated by Suez.
- 1.3 It should also be noted that GMCA is now in the minority amongst local authorities with most others that operate HWRCs having access restrictions in place to control trade waste. All of the neighboring authorities (Lancashire, Derbyshire, West Yorkshire, Merseyside, Cheshire East and Wigan) have permit schemes in place that restrict access for vans, trailers and other commercial type vehicles. The absence of a scheme in Greater Manchester will currently be contributing to movement of trade waste into the GMCA sites from these neighboring areas and therefore needs to be addressed.

#### 2.0 CURRENT ARRANGEMENTS AND CONTRACT REQUIREMENTS

- 2.1 If commercial waste is allowed to enter HWRC sites it can cause a number of problems including:
  - congestion on site, which may deter other site users;
  - difficulties of segregating commercial and household waste, and associated reporting;
  - additional service vehicles being required on site;
  - the costs of additional disposal;
  - effects on the morale of site staff if they know abuse is taking place and they are not supported in taking preventative action; and
  - commercial waste not being segregated into different recyclable streams, thereby affecting the recycling rate of the affected HWRC facility.

BOLTON	MANCHESTER	ROCHDALE	STOCKPORT	TRAFFORD	
BURY	OLDHAM	SALFORD	TAMESIDE	WIGAN	
		Page 99			

- 2.2 The current access controls at the 20 HWRCs in Greater Manchester only restrict by vehicle height through the use of a 2 metre height barrier at the entrance and exit to each site and no restrictions on trailers. This means that all small vans and even twin axle trailers can use the sites. Any vehicle which cannot access the sites due to the height restriction is redirected to a main weighbridge site where the vehicle can tip off subject to confirmation that it is carrying household waste. In order to establish the category of waste being carried is from domestic householder sources, there is a requirement for drivers of over height vehicles to produce documents at the weighbridge, either a Council Tax Bill or recent utility bill relating to the property where the waste is from, and to declare the materials have not been produced from commercial activity. In addition to the above, residents using hired vehicles need to produce the hire agreement document. ANPR records are used to track repeat visitors and challenge the nature of the waste being delivered. In these instances, site users are requested to sign a Disclaimer document to declare that their waste is from a domestic household source and not the product of any commercial activity.
- 2.3 There are a number of key requirements in the Lot 1 and Lot 2 contract specifications that will require Suez to develop and implement appropriate trade waste control measures at the HWRCs. These include:
  - The Contractor shall ensure that the first experience of each Service User at a WRMS
    HWRC shall be pro-active and helpful 'meet and greet' assistance by a member of the
    WRMS HWRC staff in respect of which the Contractor shall ensure that:
    - each Service User is a resident of the Administrative Area (ie Greater Manchester). If this is not the case, then the driver of the vehicle shall be redirected to similar sites operated by the local authority in which they are resident;
    - Trade Waste does not enter the WRMS HWRC and, to the extent that it comprises Allowable Trade Waste, is redirected to an appropriate Reception Point;
    - each Service User discloses the nature of Waste they have brought to the WRMS HWRC;
    - Waste that cannot be accepted at the WRMS HWRC is identified and the Service User re-directed to an appropriate facility or service; and
    - each Service User is directed to the appropriate area of the WRMS HWRC and receptacles for the Contract Waste and items of Contract Waste they brought to the WRMS HWRC.
  - The Contractor will be responsible for the operation of vehicle access restrictions in accordance with the Authority's Policies in order to prevent the deposit of Trade Waste at WRMS HWRCs, all in accordance with the HWRC Plan.
  - The Contractor shall operate the WRMS HWRCs using the ANPR system and CCTV to enable the logging and recording of all Service User and all other vehicles and linking the vehicle registration to an electronic register of the delivered loads.

 The delivery of proactive measures and assistance by WRMS HWRC staff to encourage and promote Service Users to place Contract Waste or items of Contract Waste in the correct receptacle to facilitate (in order of priority) Re-use, Recycling, Composting, Beneficial Use in priority to the generation of Residual Waste, and energy Recovery and other diversion from Landfill in priority to Landfill.

#### 3.0 ACCESS CONTROL EXAMPLE SCHEMES

- 3.1 Many other local authorities operate sites with enhanced commercial waste control measures in place. A number of examples are set out at Appendix A.
- 3.2 Most of the approaches taken elsewhere involve the use of some form of permit scheme to limit access by certain vehicle types and to restrict access to residents of the administrative area of the local authority. Based on discussion with officers, all schemes reported no increase in flytipping in the vicinity of sites once these schemes had been introduced. In all of the examples in Appendix A where permit schemes are operated, the number of sites, annual tonnage throughputs and number of households in the administrative area are all significantly lower than Greater Manchester. Developing a workable permit scheme for over 1 million households is likely to have significant administration costs and complexity and a permit scheme may therefore not be the right approach.
- 3.3 Ultimately, to control commercial waste inputs to the Greater Manchester HWRCs, an access restriction scheme will be required but this does not need to be based on a permit type scheme. The alternative approach proposed by Suez is based on use of ANPR to track specific vehicle visits against pre agreed limits.

### 4.0 SUEZ PROPOSALS

- 4.1 In accordance with the Lot1 and Lot 2 contract Specifications, Suez will introduce a meet and greet process at the HWRCs. All Suez site staff will have customer service training. The meet and greet operatives will undertake regular random resident checks, recording postcodes of site users who are delivering waste into the HWRCs. The meet and greet operative may also ask further questions if they have any suspicions regarding the source of the material delivered.
- 4.2 Site users may be asked to sign a disclaimer that the waste they are delivering is from their household. This would then be reported to GMCA and tracked and recorded on a site by site basis. Suez will train site staff to challenge any suspicious activity in a competent and professional manner. Suez will operate HWRCs using the ANPR system and CCTV to enable the logging and recording of all vehicles and linking the vehicle registration to an electronic register of the delivered loads. Suez will utilise ANPR data and interrogate it to highlight the top 30 offenders for accessing the HWRCs. When trade waste is turned away from a HWRC, SUEZ will use data from the ANPR system to relay information in real time on to other HWRCs and reception points.

- 4.3 Suez will install and use electronic display boards that will supplement the already installed ANPR system, with the boards displaying registration numbers and vehicle authorisation. Suez will install the electronic display boards within the first 3 months of the contracts. The ANPR system (and CCTV systems) will be monitored by staff located at the Higher Swan Lane site in Bolton. The system will record all site users visiting the HWRC. The system will record these records on the ANPR database. The data base will be able to track and record the numbers of visits by any vehicle. The database will have three differing vehicle statuses on the system:
  - 1. "Green list"- these are vehicles that are not flagged for investigation and have not exceeded any threshold levels of visits to any of the HWRCMS HWRC sites. No additional action would be taken in this event;
  - 2. "Amber List. These are vehicles which have reached threshold levels of numbers of site visit or where indications have been made by site staff of reasonable suspicions that the vehicle may be carrying potential trade waste (for instance if multiple disclaimers have been issue previously). These will be subject to challenge/investigation; and
  - 3. "Red"- these are vehicles that have been identified as Traders or who have exceeded the thresholds and are now to be treated as Allowable Trade waste or redirected to a 3rd party facility.
- 4.4 In summary the proposed threshold levels are:
  - Cars and cars with single axle trailers threshold level of 52 visits per year;
  - Cars with twin axle trailers and all vans and pick up trucks to be considered as trigger vehicles and subject to enhanced checks; and
  - Proposed Trigger vehicle visit thresholds:
    - Up to 3.5t gross vehicle weight 18 visits per year
    - Above 3.5t gross vehicle weight 12 visits per year
    - Car plus double axle trailer 18 visits per year
    - All trigger vehicles limited to no more than 5 bags of rubble per visit.
- 4.5 The public will not have to apply for a permit, and the Suez IT system (through the ANPR database) will count the number of visits per vehicle. The display boards on site will flag vehicles that have reached 10 visits in a month and site staff would distribute leaflets to the drive making them aware of the access restrictions and controls. Any further visits by these vehicles would then be subject to additional checks and if they were determined to not be bringing household waste, would either be classed as chargeable trade waste or be refused access and redirected away from the HWRC site.

- 4.6 Suez will allow a maximum of five bags of rubble to be delivered by members of the public per visit. This would be recorded on site through PDA or Smartphone technology. Any member of the public requiring more than the five bags of rubble would be redirected to the nearest chargeable trade waste reception point and charged for this material. Plasterboard and asbestos will still be received at the main reception sites only and not on the HWRCs.
- 4.7 Suez will work with GMCA and the WCAs to help promote a consistent message regarding fly-tipping across relevant media, including websites and via printed material. Suez will also encourage and facilitate multi agency checks on suspected traders and their vehicles at the HWRC sites. Appendix B sets out a flow chart of the proposed process to check site users and identify potential traders.

#### 5.0 GMCA HWRC ACCESS POLICY

- 5.1 Any access scheme will need to be supported by a number of other policy measures. These will include:
  - Parking restrictions being introduced on the public highway in the vicinity of HWRC sites to reduce the ability for traders to park outside and walk waste in. This will need to be implemented by the relevant highways authority in each locality;
  - Rebranding of the sites to give greater emphasis to recycling and reuse eg Community Recycling and Resource Centres;
  - Review of the half tonne minimum charge for commercial waste delivered to weighbridge sites, once the access restriction scheme has been in operation for a period of 6 months;
  - The above measure will need to be accompanied by awareness raising amongst commercial companies of their duty of care obligations for waste disposal and alternate available disposal facilities using the Environment Agency website and Dsposal website (https://dsposal.uk);
  - Enhanced security measures for staff including the use of body cams and CCTV along with additional training on customer care and managing aggressive behavior;
  - Continued use of the commercial waste disclaimer and follow up actions with suspected traders until the scheme is fully implemented; and
  - Development of an enforcement approach for repeat offenders and for any fly tipping activity in the vicinity of the HWRC sites.
- 5.2 The following key principles are required to underpin the access policy:
  - 1. The access restrictions will apply consistently to all GMCA HWRC sites;

- 2. Access to HWRCs is for Greater Manchester (excluding Wigan) residents only;
- 3. ANPR and CCTV will be used to identify suspect behaviour and potential commercial waste inputs;
- 4. On a balance of evidence basis, if commercial waste abuse is suspected vehicles will be banned from further access to sites. Individuals that are residents of Greater Manchester will not be banned (only the vehicle) as they have a right to continue to deposit household waste (see also note 5 below);
- 5. Anyone using a hire vehicle will need to produce a copy of the hire agreement and the waste will be inspected to confirm it is household waste. Any individual repeatedly delivering suspected commercial waste in hired vehicles or other vehicles will be banned from site regardless of residency if it is proven on the balance of evidence that they are disposing of commercial waste;
- 6. Violent and abusive behaviour by site users towards staff will be not be tolerated and will result in individuals being banned from accessing sites;
- 7. Details of suspected commercial waste inputs and sources will be shared with the Environment Agency and other relevant authorities; and
- 8. Districts will need to commit resources to support these measures for example through parking restrictions being introduced in the vicinity of sites, investigating any fly tipping adjacent to sites and participating in multi agency enforcement events at sites to target suspected commercial waste operators. An example of this kind of multi agency approach that has implemented with Tameside is set out at Appendix C.
- 5.3 The decision to implement a HWRC access restriction scheme will be a key decision under the GMCA constitution. This will require the decision to be progressed through the appropriate governance process including overview and scrutiny. The proposed timetable is set out below:

Phase	Suez	GMCA
1. Mar 19 to June 19	Develop ICT system specification	Finalise scheme with PB(s)
2. July 19 to Sept 19	Recruit additional HWRC staff	Waste and Recycling Committee July 19
	Build and test ICT system	
	Training of HWRC operatives	Housing Planning and Environment Overview and Scrutiny Committee Sept 19
		GMCA decision Sept 19

3. Sept 19 to Dec 19	Advertise legal requirement on waste producers	Publication of data on trade waste inputs and cost impact
	Advertise introduction of access restriction scheme	Advertise introduction of access restriction scheme
	Continued advertising of incoming access restriction scheme	
4. Jan 20	Launch access restriction scheme	Launch access restriction scheme
5. Feb 20 onwards	Enforce access restriction scheme	Publish annual review of system
	6 monthly reminders in local papers/social media alternating with GMCA reminders	6 monthly reminders in local papers/social media

5.4 It is proposed that a task and finish group composed of WCA waste officers and GMCA officers be established to agree the communication strategy and also to monitor the effectiveness of the scheme with reviews scheduled for 6 months and 12 months after the implementation date. A draft communication plan is set out at Appendix D.

#### 6.0 LEGAL

- 6.1 HWRCs are provided for the deposit of household waste by householders in the administrative area. Under the Environmental Protection Act 1990 (EPA 1990), commercial waste must be disposed of at appropriately permitted facilities for a reasonable charge and anyone transporting such waste is subject to the requirements of duty of care (set out at section 34 of the EPA 1990).
- 6.2 The proposals set out in sections 4.0 and 5.0 of this report will assist in ensuring that illegal deposits of commercial waste are restricted and controlled.

#### 7.0 FINANCIAL

- 7.1 Commercial waste inputs to HWRCs increase the running costs of the facilities and also constrains the ability of the operator to achieve high recycling rates due to increased waste throughputs and volumes of traffic. Failure to achieve the recycling rate will increase costs of landfill disposal or energy from waste recovery.
- 7.2 The Suez contract commitments in relation to HWRC recycling performance are based on trade waste access control measures being in place. In the event that a scheme to control

trade waste deposit at HWRCs is not agreed then financial consequences will flow through increased disposal costs and loss of recyclate revenues. As an indication, if recycling performance at the HWRCs did not reach the 60% target level due to lack of trade waste control measures, c.£3m per annum additional cost would result from each 5% reduction in performance below the target level.

#### 8.0 RISKS

- 8.1 There are a number of potential risks associated with the introduction of an HWRC access restriction scheme:
  - Reputation in the early stages of the scheme, complaints will increase as commercial operators are challenged and turned away from sites. A clear communications programme will require implementation well in advance of the scheme commencement, combined with new arrangements for charging for commercial waste. A draft communications programme is set out at Appendix D. GMCA will need to ensure that the complaints handling procedure is appropriately implemented and resourced;
  - Staff safety and resilience site staff will be placed in potentially confrontational and abusive situations. The success of any such scheme will to a certain extent rest on the diligence of the site operatives for implementation and enforcement. Staff will therefore need to be demonstrably supported by the contractor and GMCA through clear enforcement policies, training, use of body cams and training with any site users that use abusive or threatening behavior towards staff being banned from site; and
  - Flytipping in the vicinity of HWRCs there is a risk of increased flytipping if
    commercial operators are turned away from an HWRC. This is likely to only be from
    a small minority, flytipping is a serious offence and most individuals will not escalate
    from free tipping at an HWRC to flytipping. Support will be required from districts in
    monitoring the areas around the HWRCs post scheme introduction and then
    investigation and enforcement activity will be required. Information on suspected
    traders and offenders will be shared with the Environment Agency for investigation.
- 8.2 As set out in paragraph 3.2 previously, all other authorities contacted that have implemented access control schemes stated that they did not record an increase in flytipping activity as a result of introducing the controls.
- 8.3 The Waste and Resources Action Programme (WRAP) recently undertook a study of 55 local authorities that operate trade waste control measures at their HWRCs. The results of the study were reported at the Local Authority Recycling Advisory Committee (LARAC) National Civic Amenity Site conference in June 2019. Only 4 authorities reported an increase in flytipping in their areas with the increases being in line with national trends.

- 8.4 Further details from 2 schemes were also reported at the conference and these provide data on the implementation. West Sussex operate 11 HWRCs and implemented an access control scheme in 2018. Over the first 10 months of the scheme, they received 52 compliments, 307 enquiries, 28 complaints and one referral to the Local Government Ombudsman (LGO). Cheshire West and Chester operate 7 HWRCs and introduced an ANPR scheme similar to that proposed by Suez for the GMCA sites in 2018. This scheme is reported as delivering a 13% reduction in residual waste throughputs at the sites. In the region of 20,000 waste declaration forms (similar to the disclaimer used by GMCA) were completed in the first year, 6 Fixed Penalty Notices (FPNs) were issued and 25 individuals restricted from accessing the sites.
- 8.5 For all schemes introduced, a number of key lessons learnt have been identified that facilitate successful implementation:
  - Clear communication plans;
  - High levels of engagement by staff at the entrance to the site;
  - Training and support of site staff;
  - Clean and consistent application of scheme rules;
  - Clear instruction on site;
  - Robust approach to implementation and enforcement;
  - Training and information provision for businesses in relation to their obligations for waste disposal;
  - Information sharing with other agencies; and
  - Joint approach to enforcement.
- 8.6 All of these principles will be incorporated into the GMCA scheme and built in to the communications plan and operational delivery.



#### Appendix A – Examples of Permit Schemes Operated by Other Local Authorities

West Sussex County Council (WSCC) introduced a requirement for a permit for certain vehicles from October 2018. A permit must be applied for online to WSCC and can only be for an address in West Sussex. The permit can be printed at home or issued by WSCC. Photo ID to confirm residency may also be required on entry to the site. Some vehicles are being banned completely including box vans, twin axle trailers, tippers and horse boxes. In addition, two of the smaller sites will ban the use of any trailer, i.e. trailers will need to use other sites. Full details can be found at:

https://www.westsussex.gov.uk/land-waste-and-housing/waste-and-recycling/van-pickup-and-trailer-waste-permit/

Somerset County Council (SCC) via the Somerset Waste Partnership operates a permit system for a range of vehicles including vans, pick-ups and trailers. These are applied for online and are only available to Somerset residents. A number of vehicle types are banned including vans with trailers, twin axle trailers, box vans, horse boxes and tippers. SWP go further and charge for some waste streams including asbestos & plasterboard, gas bottles, soil & hardcore (greater than a single carrier bag) and tyres. Further details can be found at:

#### https://www.somersetwaste.gov.uk/apply-for-a-permit/

London Borough of Sutton (LBS) operate a system whereby all vehicles require a permit. Permits are issued on each HWRC site on production of two forms of photo identification that includes proof of residency, with only LBS residents able to receive a permit. Vans and trailers are not permitted to use sites on Sundays and Bank Holidays. Further details can be found at:

https://www.sutton.gov.uk/info/200449/waste and recycling/1147/reuse and recycle c entre rrc/2

Barnsley Council operate a permit scheme for all vehicles accessing the HWRCs where photo identification with a Barnsley address is required to access the sites. Vans require a special permit. Car permits can be obtained at the HWRCs on production of a V5. The permit is a window sticker that must be clearly displayed. Van permits entitle the recipient to a maximum of 12 visits per year. Further details are available at:

https://www.barnsley.gov.uk/services/bins-rubbish-and-recycling/permits-for-waste-and-recycling-centres/

Telford & Wrekin Council operate a scheme whereby only specified vehicles require a permit (any vehicle with a trailer, 4x4 with no rear windows/seats, pick up trucks, vans). The permit is issued to the householder rather than the vehicle and permits allow up to 10 visits per year. Staff on site have access to an electronic system showing who has a permit and how many visits they have remaining. A member of the public visiting with a vehicle requiring a

BOLTON	MANCHESTER	ROCHDALE	STOCKPORT	TRAFFORD	
BURY	OLDHAM	SALFORD	TAMESIDE	WIGAN	
		Page	108	_	

permit has to show their driving licence as proof of address which the site operatives check against their electronic system. Members of the public can check how many visits are left on their permit by logging into their account on the Council website. Further details are available at:

http://www.telford.gov.uk/info/20380/household recycling centres hrcs and e-permits/3399/e-permits

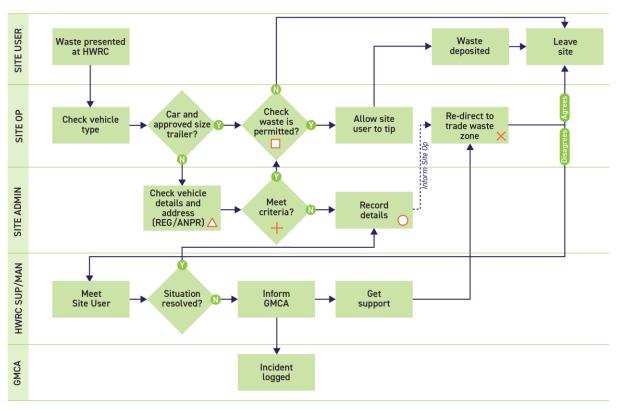
Kirklees Council operate a scheme that requires all vehicles accessing sites to have a permit and up to 2 vehicles per household can be registered. This is an electronic system with site staff checking vehicle registrations against an electronic register on arrival at the site. Certain vehicle types are banned including box vans, pickups and horse boxes. Certain waste types are also not accepted including rubble, hardcore, ceramics, soil and turf. Further details are available at:

http://www.kirklees.gov.uk/beta/your-property-bins-recycling/household-waste-recycling-centres.aspx

Cumbria County Council operate a permit scheme for vans and trailers with permits only issued to residents. CCTV is used to monitor site activity and any aggressive situations. Banning individuals from site is used as a last resort for continued commercial waste abuse. Cumbria operate 14 sites with total throughput of c.60ktpa. The stated cost for administering the permit scheme was £160kpa with 2.5 FTE staff responsible for this. Further details are available at:

https://www.cumbria.gov.uk/planning-environment/waste-management/permitscheme/default.asp

#### Appendix B - Proposed Trade Waste Control System



#### **KEY**

- Waste is listed as Permitted in EA Permit.
- Checks include: Proof of address (utility bill); vehicle registration; number of visits (ANPR); listed on trade schemes; on watch list?; previous bans/issues?
- Check all  $\triangle$  items to make informed decision.
- Record all key info: Day, date, time, registration, site user name, company name, waste types presented, any behaviour problems/staff problems. Also inform other HWRCs in the area ASAP.
- Explain why waste cannot be accepted. Link to either GMCA controls/SUEZ user rules. Give details of how and where SUEZ can accept the waste as 'Trade Waste'
- Activity/ Task.
- Decision/Question.
- Direction of flow.

#### SUEZ PROPOSALS

- Only cars (including 4x4s) with single axle trailer approved\*.
- No limits on usage for these.
- Cars using larger trailers considered as 3.5t and above vans and subject to controls → 'Trigger Vehicles' All Trigger Vehicles subject to ∆checks
   All Trigger Vehicles limited to below usage (subject to passing checks):

- 3.5t: Max 18 visits/ year free of charge (considered household waste) Larger than 3.5t: Max 12 visits/ year free of charge Car and double axle trailer: 18 visits/ year free of charge

- All Trigger Vehicles limited to 5 x bags of rubble per visit. Site User to provide bags.
- \* Unrestricted

#### **Appendix C – Joint Enforcement Team Example**

A multi agency event was carried out in March 2018 and involved officers from Tameside Licensing and Enforcement Team, GMCA Waste and Resources team, Greater Manchester Police, the Environment Agency and the Vehicle and Operator Services Agency (VOSA).

This involved stopping suspected trade vehicles on the road network around the Ash Rd HWRC, Droylsden and the Bayley Street HWRC, Stalybridge.

During the course of the day 14 vehicle stops were carried out resulting in 4 follow up actions by the Environment Agency due to lack of compliance with Duty of Care requirements. Four fixed penalty notices (FPNs) were also issued for vehicles being overweight and for various vehicle faults.

One vehicle was found to be stolen and was carrying a stolen mini digger. The driver was also found to be disqualified from driving and was remanded in custody.





#### Appendix D – Draft Communications Plan

# Household Waste Recycling Centre Access Restrictions Communications Plan September 2019

### **Executive Summary**

There are 20 household waste recycling centres (HWRCs) located across Greater Manchester, which are free to use for residents living in any of the nine out of the 10 Greater Manchester boroughs (excluding Wigan). The sites are only closed on Christmas Day and New Year's Day, sites are open on all other bank holidays.

Trade waste is not permitted and although fixed height barriers have been installed at all sites set at 2 metres high to prevent traders from entering sites, evidence suggests that a large amount of trade waste is being deposited at the sites unlawfully.

All businesses must pay for the disposal of trade waste; the HWRCs are for household waste only. Under the Environmental Protection Act 1990 (EPA 1990), trade waste must be disposed of at appropriately permitted facilities for a reasonable charge and anyone transporting such waste is subject to the requirements of duty of care (set out at section 34 of the EPA 1990).

If trade waste is allowed to enter HWRC sites, it can cause a number of problems;

- congestion on site, which may deter other site users;
- difficulties of segregating trade and household waste, and associated reporting;
- the costs of additional waste disposal as trade waste tends to mixed unsorted waste;
- effects on the morale of site staff if they know abuse is taking place and they are not supported in taking preventative action; and
- trade waste not being segregated into different recyclable streams, thereby affecting the recycling rate of the affected HWRC facility.

Trade waste inputs to HWRCs increase the running costs of the facilities and constrains the ability of the contractor to achieve high recycling rates due to increased waste throughputs and volumes of traffic. Failure to achieve the recycling rate will increase costs of landfill disposal or energy from waste recovery.

ANPR data shows that sites are generally busy, whilst the network average is around 800 visits per site per day; the busiest sites receive over 1,000 visits most days.

Waste compositional analysis data carried out at the HWRCs indicates that of the waste deposited in the general waste container, on average 18% is black bag waste, which contains 58% of items that could have been recycled.

The purpose of the proposed access policy is to restrict traders from using HWRCs in order to reduce the operating costs, increase recycling and provide an improved service for residents. In addition, the policy will provide guidance to traders to ensure they are being responsible businesses. Recently a new page was created on the Recycle for Greater Manchester website regarding how to dispose of business waste. From April to July 2019, the page received over 2,000 hits demonstrating that traders are seeking information and advice.





This compares to a new page about plastic waste, which received 1,500 hits over the same period despite extensive media coverage about plastic.

In summary the proposed threshold levels are:

Type of vehicle		No of visits per year
	Cars and cars with single axle trailers	52
	Cars with a double axel trailer	18
	Vehicles up to 3.5 tonne gross vehicle weight	18
	Vehicle above 3.5 tonne gross vehicle weight	12

In addition, all vehicles will be limited to no more than five bags of rubble per visit.

The number of visits will be monitored by ANPR and CCTV cameras on site and these will be linked to a central system at the SUEZ regional office in Bolton. Digital display boards at each HWRC will show the number of visits a vehicle has made each month.

#### **Objectives**

- To communicate the HWRC access restrictions to traders to prevent them from using the HWRCs unlawfully;
- To raise awareness of traders duty of care to ensure they understand how to dispose of their waste via commercial weighbridges or by setting up a commercial collection;
- To raise awareness of a householder's duty of care to ensure they understand their responsibility to dispose of household waste appropriately and to ensure that any





waste generated by tradesmen undertaking work for the householder at their property is also disposed of appropriately and not at the HWRCs;

- To run a Greater Manchester wide fly tipping campaign to target fly tipping hotspots and to reinforce traders and householders duty of care; and
- To communicate HWRC access restrictions to residents to encourage them to use the sites for the disposal of correctly sorted household waste and recycling, thereby increasing recycling and reducing contamination of recycling and waste containers.

#### **Key messages for Traders**

- HWRCs are for the use of Greater Manchester residents only (excluding Wigan);
- As a trader you have a responsibility to dispose of your waste either by taking it to a commercial weighbridge where you will be charged, or by setting up a commercial waste collection service which is chargeable or by paying for a skip;
- This applies to all traders and businesses no matter how large or small;
- If you carry waste from your business, you must be registered with the Environment Agency and have a waste carriers licence, (lower tier waste carriers licences are free); and
- If you carry out building work for a householder, you must remove the waste you produce and include the charge for waste disposal in the job and pay for disposal at a suitable permitted facility, not via the HWRCs.

#### **Key Messages for Residents**

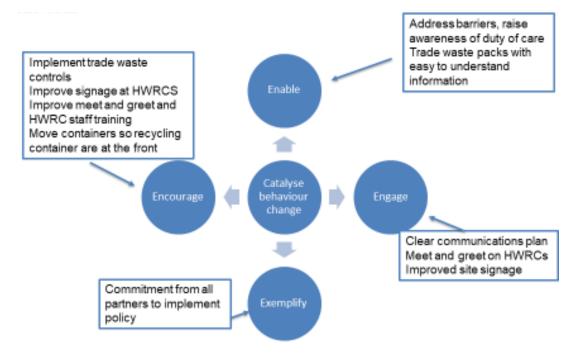
- HWRCs are free to use for Greater Manchester residents only (excluding Wigan);
- For the majority of householders in a standard car, you will be restricted to one visit
  per week on average regardless of which site you use. This rule applies even if you
  use different HWRCs;
- Separate your waste before you visit to make it easier to recycle. This helps us to keep costs down and operate the site more efficiently maintaining the service for all residents:
- You can recycle approximately 40 different types of waste items at the HWRCs including electrical items, batteries, wood, lightbulbs, cardboard etc;
- If you are recycling rubble, you will only be allowed to bring 5 bags per visit; and
- Understand your duty of care If you have building work done on your house by a
  professional trader, they are responsible for removing the waste and they will charge
  you accordingly.

#### **Behaviour Change**

Below are the key steps in a behaviour change campaign







All residents and traders will have different motivations to change their behaviour based on their own knowledge, behaviours, attitudes, habits and routine. The campaign will take this into account by developing a range of different messaging and using social norming techniques to encourage behaviour change. Segmentation data identifies six segments in Greater Manchester, which are:

Segment 1: What's in it for me?;

Segment 2: Nice and neighbourly;

Segment 3: Community conscientious;

Segment 4: Rule abiders;

Segment 5: Global ideals;

Segment 6: Indifferent; and

Segment 2 residents will recycle because they care about their local area, segment 4 do it because they like to follow the rules and separate their waste correctly.

Each person in Greater Manchester will fall into one of these segments. This provides us insight into common motivations for changing behaviour, which will be used to develop the messaging.





## **Actions**

Activity	Date	Comments
Target Audience - Traders		
Produce trade waste pack to advise traders of their duty of care which can be given out at HWRC	September 2019	
Update R4GM website business waste pages to provide clear information on traders duty of care	Sep 2019	
Run joint awareness raising campaign with key stakeholders to advise traders of their duty of care	Oct 2019	Key stakeholders include Suez, Local council enforcement officers, Business Growth Hub, Chamber of Commerce, Dsposal
Implement fly tipping campaign (Lets Scrap Fly-tipping) with local councils and partners	Jan 2020	Hertfordshire CC have developed a toolkit of resources available for use by any local authority to use. More details below.*
Tannat Audianas - Davidanta		
Target Audience - Residents	T a	
Implement customer service training to Suez HWRC staff at all staff	Start September 2019	Suez are recruiting additional HWRC staff per site
Produce leaflet to be handed out at HWRC site to explain residents duty of care, new restrictions and how to use the HWRC to recycle as much of their waste as possible	Jan 2020	
Install community noticeboards displaying the recycling rate for each site	Sep 2019	Recycling rate will be shown for each site on the R4GM website and social media will be used to thank residents for recycling
Update R4GM website with clear guidance on the restriction policy, explain why the restrictions have been introduced.	Jan 2020	
Produce a video explaining how to use the HWRC, including top tips, plan your visit, and separate your waste before your visit.	Jan 2020	





Carry out survey online and at site to ask residents how they rate their visit	Oct 2019/March 2020	This will be used as a way of monitoring customer feedback
Social media advertising to raise awareness of new restrictions.	Jan 2020	Social media toolkit will be provided to all councils
Advertising in local newspapers, council magazines, enewsletter to promote the changes to the HWRCs	Jan-March 2020	
Press release to inform residents of the changes		
Rebrand HWRCs as Community Recycling Centres – update signage and website	Jan 2020	Rebranding HWRCs will help to define the sites as community sites for residents only. Trade waste is not permitted
Continue educational tours for schools and community groups	Ongoing	
Stakeholder Engagement		
Briefing note for all ward Councillors with a list of FAQs		
Briefing note for all call centre staff at councils, council officers		Standard response will be provided and residents will be directed to Suez to log complaints or queries
Briefing for GMCA waste and resources team and all Suez staff		
Internal communications for GMCA, Fire, TfGM and council staff		Many staff are also residents of Greater Manchester





#### \*Let's Scrap Fly-tipping



The Hertfordshire Fly-tipping campaign toolkit has been designed by Hertfordshire Waste Partnership which include 11 local authorities, the Environment Agency, Police and Keep Britain Tidy. To date 63 local authorities across England and Wales have successfully implemented the campaign. The campaign has been designed so it can be used by any local authority. The pack of resources can be tailored by adding appropriate logos. Resources include:

- Householder leaflet:
- Social media toolkit;
- Banner for HWRC;
- Vehicle livery suitable for refuse collection vehicles and street cleansing vehicles;
- Adverts, posters;
- · Template press release; and
- Warning stickers.

The campaign website is www.hertfordshire.gov.uk/flytipping

In addition, two videos have been produced below. These informational films cover small scale (possibly unintentional fly tipping) and can be tailored to a Greater Manchester wide campaign

https://www.youtube.com/watch?v=dLGfUGVD8NU&feature=youtu.be

https://www.youtube.com/watch?v=1E8nQkOb3Eo&feature=youtu.be

#### **Monitoring and Evaluation**

The following KPIs will be monitored throughout the campaign:

- Recycling rate at each HWRC;
- Waste arisings at each HWRC;
- No of incidents of fly tipping;
- Number of traders identified and refused entry from HWRCs site;
- Number of complaints;
- Number of vehicles visiting each site; and
- Results of site and online customer survey.

# Agenda Item 8

#### **WORK PROGRAMME 2019/20**

#### HOUSING, PLANNING & ENVIRONMENT OVERVIEW AND SCRUTINY COMMITTEE

The table below sets out the Committee's work programme for this municipal year. Members are invited to further develop, review, and agree topics which they would like to consider. Items considered last year are appended at the back of this report. The work programme will be reviewed and if necessary updated following each meeting to ensure that the Committee's work programme remains current.

The Committee has agreed the following standing agenda items:

- work programme
- an update on the GMSF if there is no substantive item on the agenda

In addition the Committee will be circulated with the GMCA's register of key decisions and the GMCA's monthly decision notice.

The work programme has been updated and, to assist members, the proposed items have been incorporated into the work programme for the Committee to review, and, confirmed subject to any changes.

Date of Meeting	Item	Responsible Officer
23 <sup>rd</sup> September	Bus Reform Consultation	TfGM
	Retro fitting of properties (to include Warm Homes Fund)	Mark Atherton
	HWRC Access Restrictions Report	Eamonn Boylan (David Taylor)
10 <sup>th</sup> October	Spatial Framework – Scrutiny to feed	
	into planned consultation process	
	GM Transport Strategy 5 Year Delivery Plan	TfGM
	Local Taxation levers for energy efficiency	Mark Atherton
	Clean Air Plan	Megan Black
	Electric Vehicle Charges	Eamonn Boylan (Steve Warrener)
	Housing Investment Loan Fund	(Steve warrener)
	Investment Strategy	Andrew McIntosh
14 <sup>th</sup> November	Town Centre Strategy – Mayoral Development Corporation Page 119	Andy Burnham

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Bed Every Night/Housing First progress update	Andy Burnham
Streets for All Strategy	TfGM
Draft City Transport Strategy	Nicola Kane
High Rise Cladding	Paul Dennett/Jenny Seex present update on progress of working group
Progress with Delivery of the 5 year Environment Plan	Mark Atherton
Greater Manchester Strategy	
	Mike Wright
Plastic Free GM and Zero Waste and Circular Economy Plans	Mark Atherton
Items Considered at previous meetings	
Greater Manchester Strategy Implementation Plan	Anne Morgan and Steve leading
Housing Funding Streams  TfGM – Local Concessionary Travel Charge	Steve Fyfe Steve Warrener
	Streets for All Strategy Draft City Transport Strategy High Rise Cladding  Progress with Delivery of the 5 year Environment Plan Greater Manchester Strategy  Plastic Free GM and Zero Waste and Circular Economy Plans  Items Considered at previous meetings Greater Manchester Strategy Implementation Plan  Housing Funding Streams  TfGM – Local Concessionary Travel

# Items Considered in 2018-19 by the Committee

05.06.18 Update work on town centres
Waste Strategy presentation

	Housing Package
	Zonal Fare Structure on Metrolink
12.07.18	Cycling and Walking Update
	Green Summit Springboard Report
	Northern & Network Rail
	GMSF
	Introduction of a Zonal Fare Structure on the Metrolink Network
16.08.18	Clean Air Plan
	Transport planning in the context of the GMSF
13.09.18	Natural Capital and Urban Pioneer
	GM Congestion Deal
	Plastic free GM
11.10.18	Housing Vision Strategy
	Homelessness update
	Waste Procurement technical solutions
15.11.18	GMS six monthly update on Performance & Implementation Plan
	Bus Reform Update
	Draft Waste and Resources draft Strategy
	Draft Natural Capital Investment Plan
13.12.18	Cancelled
10.01.19	Walking & Cycling Update/ Streets for All
	Transport Capital Programme
	Clean Air Plan Update
	Future of Greater Manchester
	Stockport Mayoral Development Corporation
14.02.19	GMSF
	Transport 2040 Delivery Plan
	Infrastructure Framework 2040
	Final Draft GM Natural Capital Investment Plan
	Housing Vision
14.03.19	Future Innovation in Transport
	Green Summit – 5 Year Environment Plan
11.04.19	GMS six monthly update on Performance and Implementation Plan
	GM Housing Strategy
	The Smart Energy Plan
	Northern Powerhouse Rail and HS2:
	TfGM Update On Transport For The North Issues

