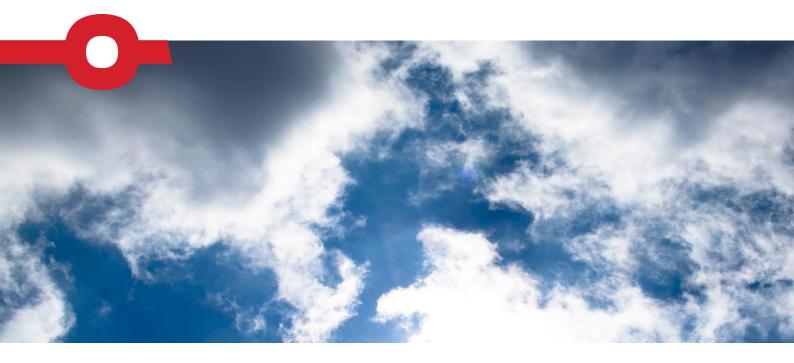
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GREATER MANCHESTER CLEAN AIR PLAN: CONSULTATION ACTIVITY

RESEARCH WITH HGV OPERATORS





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RESEARCH WITH HGV OPERATORS

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EXECUTIVE SUMMARY

Background and Approach

Transport for Greater Manchester (TfGM) commissioned SYSTRA to undertake a research study to understand the perceptions and impacts of the measures appearing in the revised draft Clean Air Plan, on HGV-owning sole-traders, micro and small businesses, registered in Greater Manchester. Using indicative figures and scenarios, attitudes, anticipated behavioural responses and the decision making process was explored, for use in further development of the proposals.

Twenty interviews were undertaken with sole-traders, micro- and small-businesses who own and operate HGVs licensed in Greater Manchester. Some, or all, of their vehicles are Clean Air Zone non-compliant, and therefore would be subject to the daily charge.

Response to the Clean Air Zone

Responses to the Clean Air Zone were negative. HGV operators cannot afford to 'pay to pollute', nor can they afford to upgrade their vehicle(s) without a suitable timeframe to plan and budget in.

Reactions to the Clean Air Zone can be grouped as follows:

- £100 a day is not affordable, and modest profit margins within businesses means this cost would be a significant financial strain;
- Operators will be forced out of business as they cannot afford to pay the charge or upgrade their vehicle(s) within the timeframe, which are currently not built into business plans;
- Operators will be forced to make their employees redundant, either due to business closure, or to cut costs for the business to survive; and
- Prices of compliant HGVs would increase due to increased demand, and supply levels of these compliant HGVs may not match demand, preventing upgrade even it was affordable.

Whilst there was recognition that air pollution is a problem across Greater Manchester, the CAZ was not considered a suitable solution, either due to the financial implications and/or that the scheme would simply result in air pollution 'moving' elsewhere.

Response to Finance & Renewal Schemes

Financial support is welcomed by operators and necessary to assist operators upgrading to cleaner, compliant vehicles. However, vehicle finance, either privately or supported by TfGM, is not considered an attractive option, particularly for those whose existing vehicles are not purchased through finance, and take up of this option appears likely to be low.

Reactions to the vehicle finance scheme were generally negative and can be grouped as follows:

- The thought of getting into (further) debt was not a desirable prospect, especially for operators who usually purchase their vehicles outright;
- Operators suggested that they would not be eligible for the vehicle finance due to the requirement for credit checks, low balance sheets, or, in the case of one specialised vehicle owners, they are MOT exempt or unable to obtain specialised vehicles through a finance contract;
- In principle, the finance scheme appears no different from what is available to them through the bank or a dealer. One suggested that they would prefer to go to their trusted broker;
- More information is required to enable comment on the vehicle finance, particularly on whether they would anticipate taking up the finance scheme; and



• More time is required to enable them to prepare for the introduction of the vehicle finance and to find a suitable vehicle.

Financial support for upgrading or retrofitting HGVs through the vehicle renewal scheme is more welcome. Retrofitting younger vehicles to make them compliant is an attractive option, although there is a distinct lack of clarity over which types of vehicles could be retrofitted. Financial contributions to the cost of upgrading vehicles appears to be essential in encouraging operators to purchase a compliant vehicle within the CAZ timeframe.

Reactions to the vehicle renewal scheme were generally positive, with operators suggesting that:

- The scheme was preferable to the vehicle finance scheme, especially for operators who usually purchase their vehicles outright and who do not want or cannot afford (additional) debt; and
- The vehicle renewal scheme grant would provide them with help towards an upgrade.

Conclusions on Minimising Significant Financial Consequences

Even with financial support, not all operators will be able to adapt and there is significant risk that operators will be put out of business, impacting families and employees; they are as equally unable to absorb the cost of the charge into their business as to secure the capital required to upgrade, even with assistance.

To minimise the risk of putting sole-traders, micro and small HGV operators out of business, TfGM could consider:

- Making the smallest of operators exempt from the charge, on the basis that fewer miles are completed by their vehicles than larger operators and/or their vehicles are specially adapted and therefore harder to replace;
- Making the smallest of operators temporarily exempt from the charge, as an additional few years to plan and budget was considered a far more workable adaption timeframe, and more fitting with natural lifecycles of vehicles; or
- Making the smallest of operators temporarily exempt from the charge, whilst offering financial support to encourage upgrades as soon as possible.

Conclusions on Incentivising Upgrade to Compliant Vehicles

To incentivise upgrade to cleaner HGVs, the proposed financial support measures could be made more appealing to operators. Suggestions for consideration include:

- Offering finance terms more attractive than available privately, including lower interest rates, lower deposit requirements, a flexible repayment periods defined by the operator, alternative arrangements to credit checks;
- Increasing the financial support available on the vehicle renewal schemes, particularly for vehicle upgrades to fall more in line with a deposit cost for a HGV; and
- Remove the requirement for vehicles to have a valid MOT, as some adapted vehicles are exempt from requiring an MOT, and this would prevent access to the support.

A number of operators are required to use adapted vehicles, making them highly specialised, meaning replacement has additional cost and timescale implications, adding further need to consider the role of (temporary) exemption.

Operators would also benefit from reassurances that the compliance standards will not change in the future, so the upgrade can be considered a longer-term investment.



Financial support applications should be made available as early as possible, with a clear notice period, as there is some evidence that operators may be deferring upgrades whilst they await clarity on the CAZ and support measures. Other operators may inadvertently upgrade to a non-compliant vehicle shortly before the introduction of the CAZ, adding additional financial implications to their business.



1. INTRODUCTION

1.1 Study Context

- 1.1.1 In 2017, the UK Government published a revised plan to improve the UK's air quality at local, regional and national levels, requiring local and regional areas still exceeding statutory limits for nitrogen dioxide (NO₂) to comply with legal limits (annual average of 40 µg/m³) in 'the shortest time possible'. The statutory responsibility for the reduction is placed on local authorities, guided by the Department for Transport and Department for Environment, Food and Rural Affairs (Defra) Joint Air Quality Unit (JAQU).
- 1.1.2 The UK Government has directed Greater Manchester authorities to produce a regional Greater Manchester Clean Air Plan, in order to reduce displacement effects across the ten districts and ensure that other Greater Manchester strategies can be complemented. This joint approach will benefit nearly three million people.
- 1.1.3 Working in collaboration, Transport for Greater Manchester (TfGM), the Greater Manchester Combined Authority (GMCA) and the 10 Greater Manchester local authorities produced an Outline Business Case for the Clean Air Plan which provided information on the best performing measures to reduce NO₂ levels, including the introduction of a Clean Air Zone. This Outline Business Case went through local governance approvals in early 2019. SYSTRA has been commissioned by TfGM to undertake a series of research studies following this, including:
 - Deliberative workshops in March 2019 with taxi, PHV, coach, HGV and LGV operators; and
 - Deliberative workshops in October 2019, with taxi and PHV drivers and operators using non-CAZ-compliant vehicles.

1.2 Research Objectives

- 1.2.1 TfGM commissioned SYSTRA to conduct further qualitative research with non-compliant HGV-owning sole-traders, micro and small businesses, seeking to determine how they would interact with the proposed Clean Air Zone (CAZ), how it would impact their business, and to better understand their reactions and thoughts toward funds and loan finance offers.
- 1.2.2 The specific objectives of this phase of research are to understand:
 - Current buying and selling behaviour for HGVs, including how vehicles are purchased, where they are purchased and by which method they are purchased (i.e. owned, leased, financed);
 - Reactions (attitudinal and behavioural) towards a Clean Air Zone and associated payment terms; and
 - Reactions (including behavioural impact) to different funding and loan scenarios, including at what level, and under what conditions, they may alter their response to the Clean Air Zone.

1.3 Report Structure

- 1.3.1 This report is structured as follows:
 - Chapter 2 provides our methodological approach;



- Chapter 3 outlines purchasing behaviours;
- Chapter 4 outlines perceived impacts of the Clean Air Zone;
- Chapter 5 describes business' likely responses to the Clean Air Zone;
- Chapter 6 describes business' likely response to the proposed financial incentives; and
- Chapter 7 presents the research conclusions.



2. METHODOLOGY

2.1 Research Approach

2.1.1 Twenty interviews were undertaken in January and February 2020 with sole-traders and micro and small businesses who own and operate HGVs, all of whom have a Clean Air Zone non-compliant vehicle¹ licensed in Greater Manchester. A summary of topics discussed can be found below in Figure 1, and the full topic guide can be found in Appendix A.

	Figure 1. Interview Structure		
Buyi	ng behaviour discussion		
0	Existing and anticipated future purchasing behaviours, including vehicle ownership model and payment method.		
Clea	n Air Zone (CAZ) information provision		
ο	Participants were presented with information on the proposed CAZ.		
CAZ	discussion		
0	The CAZ, its potential impacts, and HGV operators' likely behavioural responses to it.		
Fina	ncial Support Measures information provision		
Ο	Participants were presented with information on indicative Financial Support Measure scenarios, proposed to help HGV operators upgrade their non-compliant vehicles.		
Financial Support Measures discussion			
0	Potential impacts of the indicative support measures, likely behavioural responses, and any resulting changes, if at all, in views and behavioural responses toward the CAZ.		

2.1.2 A deliberative research approach was undertaken, to allow for full articulation of discussion topics before and after information was provided. This information enables participants to fully immerse themselves in the CAZ and draft financial support measures, allowing them to envisage potential impacts within the wider context.

¹ This is defined in the Outline Business Case as a diesel HGV first registered before 2015 (Euro I-V).



2.2 Information Provided

2.2.1 The information provided on air quality, the CAZ, and two indicative financial support scenarios, is summarised below. Full details can be found in Appendix B.

Clean Air Zone (CAZ):

- A CAZ covers an area of a city or region, and operates 24 hours a day, 365 days a year, with vehicles travelling into, within and through a defined area having to comply with emissions standards or pay a penalty charge;
- The goal of a CAZ is to encourage people to upgrade to a cleaner vehicle the more people that comply and do not have to pay, the better;
- Greater Manchester is proposing a Category C CAZ across all local roads in Greater Manchester from 2021. This means older heavy and light goods vehicles, buses, coaches, taxis and private hire vehicles would be charged from the summer of 2021;
- Non-compliant HGVs are those with Euro V or earlier diesel vehicles;
- An indicative daily charge of £100 is proposed for HGVs, with an additional £120 daily charge notice should the daily charge go unpaid. Charges are subject to further development, consultation and engagement.

Vehicle finance scenario:

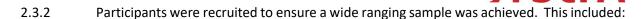
- Drivers and operators of non-compliant HGVs licensed in Greater Manchester for at least 12 months, could apply for finance to cover the full costs, or lease of, cleaner replacement vehicles;
- Finance contracts will likely be for terms of up to 10 years, with monthly re-payments;
- Finance will be subject to evidence of a suitable deposit and credit checks and will have a competitive interest rate;
- Vehicles must have a valid MOT and road tax at the date of application and funding must be used to replace the vehicle with a compliant new or second-hand vehicle.

Vehicle Renewal Scheme scenario:

- Drivers and operators of non-compliant HGVs licensed in Greater Manchester for at least 12 months, could apply for financial support to upgrade to cleaner vehicles;
- Current proposals estimate that the following amounts could be available: £16-18k for retrofitting; and £5.5k for a replacement;
- Vehicles must have a valid MOT and road tax at the date of application, and funding must be used to replace the vehicle with a compliant new or second-hand vehicle or retrofit with an approved retrofit solution.

2.3 Sample

2.3.1 All participants owned a Greater Manchester licensed HGV, which would be noncompliant after the introduction of the Clean Air Zone in 2021.



- A mixture of micro, sole and small businesses, including those:
 - In the following sectors: waste; removal; general haulage; building; utilities; scrap metal; and building waste. These sectors were identified as the most vulnerable to Clean Air Plan impacts in TfGM's analysis of the Greater Manchester freight market; and
 - With the following specialised vehicles: using cranes or large skips; food recycling; recycling/waste vehicles; or other adaptions, such as Moffett truck-mounted forklifts.
- Operators spread across the 10 Greater Manchester boroughs.
- 2.3.3 Table 1 outlines the sample of participants participating in interviews by business size. A full breakdown of the participant sample can be found in Appendix C.

BUSINESS SIZE	TOTAL
Sole (1 employee)	3
Micro (between 2-9 employees)	13
Small (between 10 and 25 employees)	4
Total	20

Table 1. Participant sample

2.4 Analysis and Reporting

- 2.4.1 With consent from participants, discussions were voice recorded. Verbatim quotes have been provided throughout this report, alongside identifiers on whether the participant is a sole, micro or small business, the number of HGVs they have in their fleet, and whether their vehicles had any special features. Special features included integrated cranes, ramps, tai lifts or forklifts or being a large skip or recycling/waste vehicle or being heavy tonne (i.e. up to 400 tonnes).
- 2.4.2 As with all qualitative research, it should be noted that:
 - While the views of participants from a range of HGV operators are represented in the research, the sample selected for this study is not statistically representative;
 - Whilst numeric values have not been applied to the findings, descriptors such as 'few', 'some', 'many' and 'most' have occasionally been used to provide an understanding of the prevalence of the opinion, where appropriate;
 - Where the views of different participant types are compared, the small sample sizes in the different groups should be taken into consideration when interpreting findings; and
 - The views and opinions reported are based on statements made by participants, and are not necessarily factually correct.
- 2.4.3 If differences between different participant types are not highlighted, it can be assumed that the views expressed did not vary significantly by these characteristics.



3. PURCHASING BEHAVIOUR

3.1 Introduction

3.1.1 This chapter describes HGV operators' current and anticipated future purchasing behaviour, including the ownership models they tend to use, and the different considerations taken into account during purchasing decisions.

3.2 Ownership models

3.2.1 There were three broad types of HGV ownership. About half of the operators spoken to owned their vehicles outright, with the other half either owning the vehicle on finance, leasing the vehicle, or a mix of ownership models. The reasons for these different approaches to vehicle ownership are summarised in Figure 2 below.

Figure 2. HGV ownership models

Own outright

- Financial reasons i.e. not being able to support loans and interest payments within the businesses budgets or the vehicle being affordable to purchase outright due to the business coming into money or tight budgeting.
 Ability to make
- adaptations or purchase specialised vehicles more easily compared to vehicles owned through a lease.

Finance

 Hire purchase terms, with vehicles eventually owned, allowed operators to retain vehicles within their fleet – this was viewed as a tool for upgrading their fleet i.e. a vehicle's value can be used as a deposit at a later date.
 More affordable for businesses who may not have the cash to make

an outright purchase of

multiple, newer vehicles.

Lease

- Flexibility and financial reasons i.e. able to use and pay for vehicle as and when required.
- There was concern from operators with 5 or more vehicles that leasing is not good value for money or not possible for specialised vehicles.

Case Study 1. Micro Business in Stockport

A 40-year old, family-run, micro business, operating 14 HGVs, always chooses to own their vehicles outright because they do not like having debt that has to be paid out on a regular basis. This is because there is not enough money in the business to support the repayments; they operate on very tight finances, with no more than £60,000 annual revenue to cover overheads and the wages of eight staff. They also operate second-hand vehicles, which are cheaper to purchase, for this reason.

This operator would not be able to run all new vehicles on finance contracts, as they would not pass credit checks and the loan for just ten of their fourteen vehicles would be £1,000,000. Not only would this create an unaffordable 10% deposit of £100,000, but they would not be able to afford the finance repayments.



"We own outright, we had had a reasonable summer and we knew we had to replace the old one so we put money toward it." (Micro Business, 1 HGV, Specialisms)

"We've got some that we own [after finance] and some on [current] finance [contracts], we couldn't afford to buy them outright." (Micro Business, More than 5 HGVs, Specialisms)

"I lease the truck at the moment... I've got a contract with a local place and I can get out of it pretty much when I want to... I didn't want to get too deep until I'd tested it out." (Sole trader, 1 HGV)

"We don't hire vehicles because you're looking at £250 per week which is really wasting money." (Micro Business, more than 5 HGVs)

3.2.2 There were also instances of operators with more than five HGVs choosing a mixture of HGV ownership types, depending on the finances available within the business. This included a mixture of vehicles being purchased outright and others being purchased through finance or leased on a rolling basis.

3.3 Purchasing now and in the future

- 3.3.1 HGV operators tended to purchase their vehicles directly from a dealer who would source a vehicle for them, based on a given specification.
- 3.3.2 Specifications tended to prioritise the cost of the replacement vehicle as the purchase is viewed as a large financial burden, with operators noting that cost is often a restricting factor, due to the business running on tight finances.

"We got a good deal... the best we could get for the money. The budget is clearly the main driver and then we just look at the attributes of the vehicles, it needs to be curtain sided with a tail lift... all the equipment for carrying dangerous goods." (Micro Business, 1 HGV, Specialisms)

"When you get to our scale, we're quite restricted in how we do it and what we can buy because of our budgets and our operating profit, basically, so we generally buy them ... we will reserve profits over the course of a few years to put to a new vehicle." (Micro Business, Over 5 HGVs, Specialisms)

- 3.3.3 In addition, the age of a vehicle was a key purchasing consideration, with operators tending to purchase second-hand vehicles, rather than brand new. Reasons for this included: second-hand vehicles being cheaper to purchase outright; and wear and tear means there is no benefit in paying a premium for a new vehicle.
- 3.3.4 Other considerations important to operators' purchasing decisions, included:
 - The perceived reliability of a vehicle, to give an indication as to how much maintenance, and associated cost, it will require in the long-run;
 - Whether the vehicle has been, or can be, adapted to include required specialisms. These were usually part of the vehicle at purchase or added by a trusted fitter or on-site mechanic;



- The fuel efficiency of the vehicle, with operators noting that a vehicle has to provide value for money;
- The mileage of a vehicle, although this was less important for some operators who noted that HGVs are made to do high mileage over their lifetime;
- The external condition of a vehicle which operators viewed as integral to their brand, however, this was less important for operators who completed heavy haulage jobs, or driver training; and
- The make of the vehicle.

"We always run older fleets because there isn't enough money to run new fleets and they get hammered... people come along covered in oil and muddy feet and you're out with people and they do scrape them and they do do things to damage them." (Micro business, more than 5 HGVs)

"[We look for] reliability so if something does go wrong you're not going to wait." (Micro Business, 1 HGV, Specialisms)

"It depends where we get the best deal for the lowest mileage, the cleanest vehicles... that don't look like they've been hammered in their use so we're not continually paying out for repairs... we don't have spares so we need things that are going to be OK and that we can maintain and keep running... they've usually got about 100,000km on the clock... we need value for money." (Micro business, more than 5 HGVs)

- 3.3.5 There was a high level of awareness of the Greater Manchester Clean Air Zone (CAZ) which brought about a level of uncertainty over future HGV purchases, with operators, especially amongst those who own their vehicles outright, voicing concern over the compliance standards of vehicles under the CAZ.
- 3.3.6 Specific concerns included:
 - The higher cost of Euro VI vehicles, meaning replacements would exceed budgets, especially as demand for Euro VI increases driving up costs;
 - The reliability of Euro VI vehicles, with operators citing awareness of issues with software maintenance and Adblue²;
 - The CAZ requiring them to upgrade their vehicle earlier than anticipated, and therefore budgeted for;
 - An expectation that CAZ compliance standards would change once again in the near future, requiring them to make multiple unaffordable upgrades to their fleet in a short timeframe; and
 - Non-compliant vehicles not retaining their monetary value and therefore not covering as much of the upgrade finances as anticipated;
 - Upgrading pre-emptively would leave them worse off, as if funding did become available they would not be eligible.

"We are contemplating replacing the 1999 one... there's no use us buying it at this point in time because anything less than a Euro VI will be no good and the price of Euro VI vehicles are going through the roof now." (Micro Business, Between 2-4 HGVs, Specialisms)

"Every wagon we've seen - the new ones - there's a weak spot... the Euro VI wagons, there's not many people around who can fix them so when they break down... it just

² Adblue is a fluid added to exhaust systems in diesel vehicles to reduce the nitrous oxide emissions produced Greater Manchester Clean Air Plan: Consultation Activity



shuts off and that's it. It's going nowhere... no one's got the software to repair them... there's a big issue with Adblue." (Micro Business, 1 HGV, Specialisms)

"We're having to dispose some of our older vehicles a bit prematurely because we're having to purchase more newer vehicles that conform to Euro VI specification." (Small Business, More than 5 HGVs, Specialisms)

"There were people there from Greater Manchester Council, and they said funding would be available to get compliant. But if I've already started to get myself compliant, does that mean I'll miss out on the funding if I go out and buy a fleet Euro VI's to be compliant, ready for when it comes in, will I not get any financial support then." (Small Business, More than 5 HGVs)

- 3.3.7 Some operators had recently upgraded some of their fleet to either Euro IV or V in order to be compliant with other clean air zones, such as those in London. Additionally, some operators had recently updated some of their fleet to Euro VI, with one participant concerned that they would be unlikely to receive retrospective compensation for these changes.
- 3.3.8 Despite these concerns, operators, especially those with more than 5 HGVs, did suggest that they may look to replacing their vehicle(s) in the near future with a Euro VI.

"We're holding off replacing too much because we don't know what's happening with clean air.... we don't want to buy too much that's non-compliant... we've got one in mind that we want to replace. It's a good tool for us. We'll try and get a newer version toward the end of the year." (Micro Business, More than 5 HGVs, Specialisms)

- 3.3.9 Without the introduction of the CAZ, different operators have different ages at which they seek to replace vehicles. This is usually before they become too expensive to maintain, cited as between the 5-10 year old mark. For those with multiple vehicles, replacements are made on a rotation, over many years, with the eldest updated each time through tight budgeting, rather than all vehicles being replaced at once. Old HGVs tended to be:
 - Sold privately (and some were aware the vehicle was then exported to another country);
 - Part-exchanged;
 - Scrapped; or
 - Kept for parts.

"If the vehicle was starting to fail and starting to cost a lot of money, that's the point that we would start to looking to replacing. We've only replaced one in the whole time we've been running since 2002." (Micro Business, 1 HGV, Specialisms)

"Normally we sell them... they go abroad." (Micro Business, more than 5 HGVs)

"Whatever we're getting rid of, we'll advertise and try to sell to a foreign client... they could go anywhere... they've gone beyond UK usage." (Micro Business, Between 2-4 HGVs)

"We usually keep the old models for spares." (Micro Business, Between 2-4 HGVs, Specialisms)



4. IMPACT OF THE CLEAN AIR ZONE

4.1 Introduction

- 4.1.1 This chapter describes HGV operators' views on anticipated impacts resulting from the introduction of a Clean Air Zone (CAZ) in Greater Manchester, including both impacts on themselves and their business, and wider impacts on the HGV industry and environment.
- 4.1.2 Initial reactions to the scheme were generally negative, and can be grouped as follows:
 - £100 a day is not affordable, and modest profit margins within businesses means this cost would be a significant financial strain;
 - Operators will be forced out of business as they cannot afford to pay the charge or upgrade their vehicle(s) within the timeframe, which are currently not built into business plans;
 - Operators will be forced to make their employees redundant, either due to business closure, or to cut costs for the business to survive; and
 - Prices of compliant HGVs would increase due to increased demand, and supply levels of these compliant HGVs may not match demand, preventing upgrade even it was affordable.
- 4.1.3 Whilst there was recognition that air pollution is a problem across Greater Manchester, the CAZ was not considered a suitable solution, either due to the financial implications and/or that the scheme would simply result in air pollution 'moving' elsewhere.

4.2 Impacts on self and their business

- 4.2.1 Impacts of the Clean Air Zone (CAZ) on individuals and their businesses were largely related to the negative financial implications caused by paying the charge or upgrading vehicle(s).
- 4.2.2 Many operators expressed their concern that they are not in a financial position to pay the charge or to upgrade to avoid the charge.
- 4.2.3 Many operators specified that £100 was simply too high a charge and simply could not be paid, with some expressing that it did not seem fair that all businesses of all sizes and all operations receive the same charge, regardless of their financial position. Operators highlighted that their modest profit margins to demonstrate the financial strain which would be created.

"It doesn't take into considerations if the business can afford that £100 per day." (Micro Business, More than 4 HGVs, Specialisms)

"It's no real surprise, judging by what's going on in London...but your £100, £120, I've heard these numbers being bounced about. It's expensive if every day I'm going down to Bury, I could potentially have £500 a week." (Micro Business, 2-4 HGVs)

"People have not got £100 a day to pay to the government and hence they make a decision that they can't afford to run the truck and park it up and not operate... we can't afford a £100 penalty just to turn out the gate every day." (Small Business, More than 4 HGVs, Specialism)



"It's a lot of money to try and find even before you try to find money for extra finance, or for a zone charge." (Micro Business, More than 4 HGVs)

"A hundred pound a day charge to run that vehicle within the Greater Manchester area, a lot of the jobs we need would have a hundred-pound margin in them, so it would effectively mean either a serious investment in a new vehicle or we wouldn't be competitive to jobs in the local area just because we wouldn't have the margin" (Micro Business, More than 4 HGVs)

"We have a lot of overheads that are the same but being spread across fewer vehicles and if you had a bigger fleet that brings the proportion down... we work very hard to compete against the bigger firms...there's no room for us to swallow £100 a day for each vehicle." (Micro Business, 2-4 HGVs, Specialisms)

4.2.4 It was anticipated by some operators that the CAZ would simply lead to the end of their business. A few operators also discussed how they know of many other business owners, relying on the operation of HGVs, who would be in a similar financial position. As such, some operators perceived that smaller businesses such as their own would be impacted the most significantly and disproportionately.

"It's quite sad really, because I really think that would be curtains." (Sole Trader, 1 HGV)

It could put us out of business because we are competing against bigger firms who have more vehicles, newer vehicles." (Micro Business, 2-4 HGVs, Specialisms)

"You just couldn't do it, and within I don't know 6 months we'd all be folding. From day one, you wouldn't make any money, you wouldn't make a wage, you'd work all week and no money out so I don't know how that would work." (Sole Trader, 1 HGV)

"It would put £500 a week on top of my fuel and lease. It would pretty much be unfeasible." (Sole Trader, 1 HGV)



Case Study 2. Micro Business in Trafford, providing general haulage services

A family run micro business, operates 14 HGVs, half of which are owned outright and the other half are on finance, and operates 7 days a week, day and night. 12 out of 14 of their vehicles have Euro IV engines and so would not be compliant with the Clean Air Zone in 2021.

The operator surmised that a given day would cost around £1,200 in CAZ charges and it would therefore cost him at least £6,000 a week. They came to the conclusion that they will have to either close the business or upgrade the fleet. They emphasised that they would not be able to upgrade the fleet all at once and would need a longer time frame for it to be possible.

4.2.5 Micro and small businesses considered the impacts on their employees. A few operators expressed concern that if their business ends, this will result in their employees becoming redundant. Other operators noted that making their employee(s) redundant may be necessary for the business to continue.



"Everyone who works for me will get made redundant and the business won't have any money to pay the redundancy." (Micro Business, More than 4 HGVs, Specialisms)

"I have a plan in place for my husband and [it] won't be that the business stays...I'd lose the yard and all the trucks... I'd have six men out of work... I play it down with the men [instructors] because if they all panic and leave now I haven't got a business." (Micro Business, More than 4 HGVs)

4.2.6 Concerns over mental health were raised, caused by the significant financial pressure and stress costs associated with the CAZ would cause.

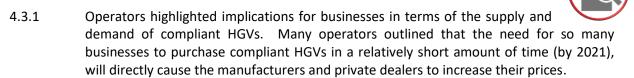
"I can't find a way that we could implement it...I can't see how we would go more than a week beyond when it comes in...your head just spins when you start thinking about it." (Micro Business, More than 4 HGVs)

Case Study 3. Micro Business in Salford, providing services in the buildings sector

A multi-generational, family-run micro business, which has been operating since the 1950s, owns all four of their HGVs outright and operates across Manchester. The business supports two generations of family, the previous retired with the notion that the business they spent their lives building up would continue to provide for them.

The operator felt there was no concern for the impacts on himself, his business and his family in terms of the financial pressure that the CAZ would create. He referenced how he is kept awake at 3 o'clock in the morning worrying what he will do next year and how he could afford to keep the business running. The operator also expressed that he is responsible for the not only both the families he is supporting, but also his employees and their families, some of whom have worked for the business for over twenty years.

4.3 Knock-on impacts



4.3.2 Logistically, many expressed concern that they would struggle to find a compliant HGV to purchase, in their price-range and suitable to their business needs, particularly those who required specialised HGVs, some of which are special order only. There were concerns that both the new and second-hand market would be depleted, preventing a vehicle upgrade, even if it was affordable.

"So in 2021, you'd be looking at x amount of HGV drivers and companies, looking for new vehicles or to get a compliant, it's just going to inflate the price. If it was over a longer period of time, but it's just been talked about, there have been murmurs, there have been rumours, then all of a sudden it's going to hit you and you're going to have to start paying straight away or you've got to change your vehicle. And your vehicle is



worth nothing. And the vehicle you need to buy is going to be over inflated." (Sole Trader, 1 HGV)

"I'm looking at second-hand vehicles, but you know, the price of everything because everybody knows what's happening, all the prices are going up so everybody is jumping on the bandwagon to make as much money out of it as they can". (Micro Business, More than 4 HGVs)

You cannot just go and buy a truck from a yard that is suitable because of the demand." (Small Business, More than 4 HGVs, Specialisms)

- 4.3.3 There were concerns over a number of knock-on impacts which could potentially arise in the lead up to and following the implementation of the CAZ, including:
 - It would be difficult to get a perceived fair price when selling their current noncompliant HGV, a concern predominantly amongst those who own their vehicles outright;
 - Shortages of HGV drivers and deliveries following mass redundancies and the role becoming less desirable; and
 - Increased stock prices across industries after charges are passed onto customers and there is less choice to generate competition.
- 4.3.4 It was also highlighted that the practical and economic dependency on the HGV operating industry is not considered within the CAZ plans.

"There'll be a shortage of drivers." (Micro Business, More than 4 HGVs, Specialisms)

"If HGVs weren't delivering stuff, within 2 days, you've got nothing in Sainsburys, and nothing in Tesco, so trucks are needed." (Micro Business, More than 4 HGVs)

"Without wagons there's no shops filled." (Micro Business, More than 4 HGVs, Specialisms)

"The goods that are in the shops, no matter what you're buying, you're paying for the cost of the service supplied to get those goods to that shelf...those of us who are left with [Euro VI] will be under more demand and the prices do go up then." (Small Business, More than 4 HGVs, Specialisms)

"But I think if you understand that everything in road transport, your shoes, your clothes, your everything is transported on roads, and yet things like the wagons are being penalised." (Small Business, More than 4 HGVs, Specialism)

"Everything gets delivered by a wagon, your food, your clothes." (Micro Business, 1 HGV, Specialisms)

4.4 Environmental impacts

- 4.4.1 Whilst there was recognition that air pollution is a problem across and beyond Greater Manchester, and that reduced pollution would be desirable and have positive health impacts, the CAZ was not considered a suitable solution by some.
- 4.4.2 Operators argued that the CAZ would simply 'move' the air pollution to the locations where their vehicles are sold to; that their vehicles are already much cleaner than they



used to be; and that private cars and taxis (paying a much lower and perceived as affordable charge) would continue polluting, so the CAZ would not have its intended effect.

"You would start all those lorries up on a winters' morning, 5, 6 o'clock in the morning and the fog that the lorries put out wouldn't clear until 10 o'clock in morning, but you don't get that now, so lorries are a lot, lot cleaner." (Micro Business, 2-4 HGVs)

"I do agree that we need to try our best, certainly Euro VI, here we go again, we've done Euro V, we're now doing Euro VI. [...] When really there are hundreds of cars on the road that are old or whatever. In my mind I think that people need to rethink the way that we buy things. So where we could send one wagon [...] to one depot and one delivery but all of a sudden you've got twenty little vans taking Joe Blog's dress that she ordered yesterday, that she needs for tomorrow, that's the wrong mindset. We've got too many of these little white vans." (Small Business, More than 4 HGVs, Specialisms)

"I think it's a bit of a joke, you've gone to the extremes. Is it going to make any difference at the end of the day, years ago it was always fog and now it's all smoke, there are no gas fires. I think it's just another thing with a congestion charge. A money making scheme. I know you say they're not making any money but I think they are." (Micro Business, 2-4 HGVs)

"You know we want the air to be clean, but we want it to be done in the correct way, with I think more research." (Micro Business, More than 4 HGVs)

"I understand why the proposal is necessary, I just think that we need financial help with this." (Micro Business, More than 4 HGVs)

"Whatever you do in Greater Manchester, there's still going to be motorway ring road running round it, so unless they're going to do something about that, you know pollution isn't going to stay in one place." (Sole Trader, 1 HGV)

"It's not just a problem in Greater Manchester, they're not putting a big glass ring over our heads...it's still there...even with electric vehicles, it comes off the breaks, the tyres, everything...I can't get my head around it." (Micro Business, 1 HGV, Specialisms)

"Air pollution is a problem but it's not just in Greater Manchester, it's a problem globally...you're not getting rid of the problem by getting rid of all HGVs, buses, whatever, going into the cities because the vehicles taken off the road in Manchester are being exported to Africa...you're not removing the problem globally." (Micro Business, 2-4 HGVs)



5. RESPONSE TO THE CLEAN AIR ZONE

5.1 Introduction

5.1.1 This chapter provides details of HGV operators' anticipated responses to the introduction of a Clean Air Zone (CAZ) in Greater Manchester.

5.2 **Overview of Anticipated Responses**

- 5.2.1 Throughout the discussion on anticipated behavioural responses to the CAZ, many HGV operators expressed that paying the £100 daily charge would simply not be financially viable for their business. Some suggested that they would attempt to pay the CAZ charge, but that it would cause significant risk to their business. Many put forward that they would consider or attempt to upgrade to a compliant HGV or fleet, caveated that they were unsure whether it would be financially possible. Some anticipated that they would be forced to end their business and change profession as they would not be in a financial position to pay the daily charge nor would they be able to upgrade. Changing their business model, including using their vehicle less frequently and modifying their workforce, was also discussed. Some operators expressed that the uncertainty of the proposed CAZ made it difficult for them to anticipate how to respond, while others simply did not know what to do, as there seemed to be no affordable option for them.
- 5.2.2 Table 2 provides a summary of anticipated behavioural responses at the beginning of the discussion, and how these changed following in-depth discussions and considerations (in advance of discussing the financial support measures). These are discussed in greater detail throughout the chapter.
- 5.2.3 Following further discussions of the proposed financial support measures available to them, some HGV operators felt more confident in their resolve to attempt to upgrade their vehicles, if TfGM could provide financial support. However, many were still left with uncertainty as to whether they could afford to upgrade, while others still expressed concerns that the CAZ would force them out of business. Reactions to the financial support measures are discussed in more detail in the next chapter.



INITIAL RESPONSE TO THE CAZ	KEY DISCUSSION POINTS	RESOLVED RESPONSE TO THE CAZ
Pay the charge	 It would not be viable to pay the daily £100 charge and continue operating the business Would consider passing the costs onto customers 	 Would pass on cost to customer where possible Would have concerns that increases costs could be a significant risk to business as they would no longer be competitive
Upgrade to a compliant vehicle or retrofit	 Would attempt to upgrade where possible Unsure how to fund the upgrade It would not be affordable to upgrade HGV/fleet in such a short amount of time Would prefer to retrofit in some case as it is perceived as more affordable 	 Would need financial support in order to make the investment in compliant HGVs Would need a longer timeframe to fund the upgrades
Leave or change profession	 Would consider early retirement but it is not an ideal option Some are not in a financial position to retire early Become a driver for another business Struggle to change a profession 	 Need to continue working in some form Would prefer to keep their business operating
Change business model	 Change their business model by: Using their vehicle less frequently Changing their workforce Working longer hours 	• Would find changing their business model difficult and there are concerns that this would not be practical
Uncertain	 Unsure how to proceed in relation to: Information available Whether they will receive help Whether the CAZ will definitely go ahead Whether the CAZ terms will change 	 Are waiting for plans to be formalised and finalised



5.2.4 Whilst operators made suggestions of what their responses would be, a lot were caveated with a level of uncertainty over how they would respond to the CAZ. Many indicated that they required more concrete information about the implementation of the CAZ. For example, many highlighted that they would need financial help to upgrade their vehicle(s) but not knowing if and how much will be available, when and whether they will be able to successfully apply leaves them in a difficult position when deciding how to proceed, many of whom again highlighted the short timescale and a sense of urgency.

"We're waiting to see what happens and how it goes." (Micro Business, More than 4 HGVs)

"The devil is in the detail, if it suited me, great. There's got to be something because nobody can afford one hundred, two hundred pounds a day. There's got to be something." (Sole Trader, 1 HGV)

"If we're going to get help, obviously, it's a bit more reassuring." (Micro Business, 2-4 HGVs, Specialisms)

5.3 Pay the charge

5.3.1 Some operators suggested that they would attempt to pay the charge, but highlighted a number of associated operating risks. While passing the costs onto the customer was proposed, it was considered that this would make their business uncompetitive and would result in the loss of customers as they would not be willing to pay higher prices, particularly for low value products. Others suggested that paying the daily charge would simply be unviable for the business to continue operating. It was concluded that paying the charge would not be an option for many.



"We'd have to put prices up if we kept our vehicle and the customers are likely to look elsewhere. We do what we can but we are in competition with some very big companies with what we do." (Micro Business, 1 HGV, Specialisms)

"It's a very, very competitive area, so our costs are quite tight. If you put it up, people will go elsewhere for £40." (Micro Business, More than 4 HGVs)

There's no way I could claim that £100 a day back off my customers, they'll just turn around and say 'it's not my fault you've not got compliant vehicles', and then obviously I'll have to lay people off, so I want to get myself ready" (Small business, more than 4 HGVs)

"If it's £100 a day, it would have to go on a job so we can still make profit. But you couldn't do it because people wouldn't pay for it. A lot of the work is contracted, it's not to the general public so it's a fixed price." (Micro Business, More than 4 HGVs, Specialisms)

"Am I gonna have to put my rates up to cover it? If I put my rates up, am I gonna lose my customers? We can't afford to risk that." (Micro Business, More than 4 HGVs, Specialisms)

"My fines for the year would be about £186,000...that's probably conservative...we're looking at £3,200 in a week and I don't take that in a week...I would have to take a loan out to pay my fine." (Micro Business, More than 4 HGVs)



"I could potentially have £500 a week [charge]...it wouldn't be sustainable, we're a cash rich company...but my lorry doesn't physically make money, it's a necessary tool for taking trailers." (Micro Business, 2-4 HGVs)

Case Study 4. Micro Business in Bolton, providing removal services

An one-hundred year old family micro-business operates four HGVs in the Bolton area.

While considering whether it would be possible to pay the charge and put the cost onto the customers, the operator expressed concerns that this would put them out of business. He suggested that they are already competing against much larger firms which have larger compliant fleets and that he would lose customers over increased prices.

5.4 Change to a compliant vehicle

Compliant purchase

5.4.1 Many operators considered the £100 daily charge unaffordable, and so they acknowledged that upgrading their HGV(s) to Euro VI would be the only viable option to continue their business. However, this would put a significant strain on their business, while, for others, upgrading would not be possible without financial assistance, and/or by the 2021 deadline, and/or at all.

"Unless I get a compliant vehicle, I wouldn't have a choice, you'd have [to] either get a compliant vehicle or look for other employment I think" (Sole Trader, 1 HGV)

"I'm in a position where I'm going to have to spend some money to modernise the fleet to remain in a position to carry on the business, but obviously there will be a financial burden on the business to get ready for 2021." (Small business, more than 4 HGVs)

"I think it would finish us. To buy a brand new skip wagon you're looking at £75-80k, and we're going to need two of them. There's a hundred and fifty thousand pounds." (Micro Business, 2-4 HGVs)

"I can't afford trucks and neither can I afford a loan to pay the trucks because a loan would be ridiculous." (Micro Business, More than 4 HGVs)

"How do they propose to get everyone to buy Euro VI. If we could buy brand new wagons, we'd have brand new wagons wouldn't we?" (Micro Business, More than 4 HGVs, Specialisms)

"Probably, a Euro VI vehicle, one of, will probably cost more than my last 4 fleet changes over the last 40 years. That's our worry." (Micro Business, More than 4 HGVs) Case Study 5. Small Business in Manchester City Centre, providing services in the utilities sector

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A small business, created by the current owner's parents operates 14 vehicles, only 2 of which have Euro VI engines.

While the operator would aim for a compliant fleet, he finds the prospect of upgrading the entire fleet a "daunting task", as replacing 12 HGVs will create a very significant financial strain on the business. The business as it is cannot operate with less than the current amount of vehicles and is therefore somewhat unsure how to respond to the CAZ.

5.4.2 Those who operate specialised vehicles also noted how it would be particularly difficult to upgrade their vehicles. It was highlighted that specialised vehicles are often significantly more expensive and would be more difficult to purchase, in terms of availability and the special order timescale.

"I've got moffets³ on the back...specialised commercial vehicles. How are we gonna afford to buy these wagons when they cost a fortune to build?" (Micro Business, More than 4 HGVs, Specialisms)

"For me to buy a new heavy haulage unit, just the unit, without the trailer, is 230 to 240 thousand pounds. Then you've got to tax it, insure it...you work to put a roof over your head and now I'm gonna have to put the house up as collateral to buy a wagon." (Micro Business, 1 HGV, Specialisms)

Compliant Retrofit

5.4.3 Some operators expressed that retrofitting their vehicle would be preferable to upgrading, as it would allow them to keep what they perceive as well-maintained vehicles and would also be the more affordable. It was again noted that this option will still require financial assistance. However, there was confusion over which vehicles were suitable for retrofitting, and conflicting suggestions made.

"Do you know what I would really like to do? Have a retrofit for Euro V, because I've got a wonderful Euro V outside." (Micro Business, More than 4 HGVs)

"Buying a new vehicle or trying to get it retrofitted will need to be discounted...we haven't included a budget for that because we've no reason to... We're looking at about 15 to 20 thousand pounds to replace a vehicle, which I don't think we're about to do." (Micro Business, 1 HGV, Specialisms)

5.5 Leave or change profession

5.5.1 Many noted that the CAZ could force them to end their business and would have to therefore leave their profession.

Retire

5.5.2 Some operators suggested that early retirement could be a possible response to the implementation of the CAZ, as they could not afford to pay the charge or upgrade their vehicles. This was not considered a desirable option. Others considered retirement, but concluded it would not be a viable option, as they need to continue working to afford the cost of living, in some cases for both themselves and wider families they are supporting.



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"I'm 49 this year so I can't retire until I'm at least 55 and I don't see how I could [change profession], I like what I do and I'm a chartered waste manager." (Micro Business, 1 HGV, Specialisms)

"The only reason I can see for making this workable is that my son is at uni and I'd like to have some money coming in to support him until he is finished but I can't see how we could go more than a week beyond when it comes in." (Micro Business, More than 4 HGVs)

Seek alternative employment

5.5.3 Whilst alternative employment was considered, some noted that they would struggle to change their profession, as it is the only job they have held and would not know what else to do. Others highlighted that it is a job they enjoy and a large part of their life and would not want to change their profession. Others suggested that remaining the operator of their business would put themselves in a vulnerable position and that it could be preferable to be an employee.

"There are some people in their 50's, it's their whole life, socially, work, it's all they have ever done" (Micro Business, More than 4 HGVs, Specialisms)

"There's not a lot of money in it so throwing more money into it would make me look at getting out... I love driving... going back employed somewhere or maybe just be selfemployed without my vehicle... that safety blanket... There's some tax reforms coming in as well...it's gonna get even harder anyway." (Sole Trader, 1 HGV)

"I think £100 a day is a hell of a lot of money... I'd go for the safety of being employed." (Sole Trader, 1 HGV)

5.6 Change business model

Use of vehicle

5.6.1 Operators considered the possibility of using their vehicles less frequently and working longer days to offset the daily charge. Some noted that it would be difficult to work longer hours than they are currently doing, highlighting the adverse impacts this could create on both their own and their employees' wellbeing. Others noted that they would not be able to change hours worked or journeys made as this was dictated by clients.

"I work from half past 5 in the morning until after 5, 6, 7, 8 o'clock at night. I'd be flogging myself and killing myself to make it work." (Micro Business, More than 4 HGVs)



"Our drivers would have to do one extra job a day at a minimum of £350, for the mileage, waste and £100 extra. There's not enough time in the day for the work that we do, to do that... he has rules as well that he has to abide by... we'd all be working our fingers to the bone to try and survive." (Micro Business, More than 4 HGVs)

"I can't do anything less than what I'm doing with it...it might be used one day a week, it might be used 5 days a week. It'll likely only be used the one day a week." (Micro Business, 2-4 HGVs)

"We don't do zero hours, so my guys get paid whether I have work for them or not." (Micro Business, More than 4 HGVs)

Modify workforce

- 5.6.2 Some operators noted that one way for them to continue operating required them to reduce their workforce. It was highlighted that as they would not able to afford to upgrade all of their HGVs, nor would they be able to afford the £100 charge for each vehicle, resulting it a reduction in vehicles, which would make some employees redundant.
- 5.6.3 Some considered hiring drivers who have their own compliant HGVs.

"We will reduce our workforce, unless we see a scrappage scheme... we are going to have a shortfall with our limited finances." (Small Business, More than 4 HGVs, Specialisms)

"We could get rid of the vehicle and see if there was any way that we could sub-contract the haulage but it's quite technical what we've got to do on site. It's not a straight forward driving job. We'd not be able to afford to pay a driver as well as myself, [a chartered waste manager] to go out and do this." (Micro Business, 1 HGV, Specialisms)



6. **RESPONSE TO INCENTIVES TO UPGRADE**

6.1 Introduction

6.1.1 This chapter provides HGV operators' responses to two draft financial support measures – a finance scheme and a vehicle renewal scheme, the potential application processes, and likely impact on decisions made in relation to the CAZ. This chapter also outlines other incentives that may encourage operators to upgrade their vehicles.

6.2 Finance scheme

Initial reaction to scheme

6.2.1 Participants were presented with the following information on the finance scheme:

Drivers and operators of non-compliant HGVs licensed in Greater Manchester for at least 12 months, could apply for finance to cover the full costs, or lease of, cleaner replacement vehicles.

Finance contracts will likely be for terms of up to 10 years, with monthly re-payments.

Finance will be subject to evidence of a suitable deposit and credit checks and will have a competitive interest rate. Deposits can come from the sale/scrappage of a noncompliant vehicle, from grant funding or from personal funds.

Vehicles must have a valid MOT and road tax at the date of application and funding must be used to replace the vehicle with a compliant new or second-hand vehicle.

- 6.2.2 Initial reactions to the scheme were generally negative and can be grouped as follows:
 - The thought of getting into (further) debt was not a desirable prospect, especially for operators who usually purchase their vehicles outright;
 - Operators suggested that they would not be eligible for the vehicle finance due to the requirement for credit checks, low balance sheets, or, in the case of one specialised vehicle owners, they are MOT exempt or unable to obtain specialised vehicles through a finance contract;
 - In principle, the finance scheme appears no different from what is available to them through the bank or a dealer. One suggested that they would prefer to go to their trusted broker;
 - More information is required to enable comment on the vehicle finance, particularly on whether they would anticipate taking up the finance scheme; and
 - More time is required to enable them to prepare for the introduction of the vehicle finance and to find a suitable vehicle.



Case Study 6. Micro Business in Bolton, providing general haulage services

As a heavy movements haulier, this operator uses a 200 tonne HGV, with specialist adaptations to maximise capacity; this makes their vehicle MOT exempt. It also means that their vehicle is not usually available to purchase as standard from a dealer or manufacturer, especially not at an affordable price. For this reason, they tend to build vehicles themselves on standard chassis, allowing them to make adaptations to suit their needs at a reasonable price. They also retain any unused parts for their vintage vehicle restoration business.

"I can't afford trucks and neither can I afford a loan to pay the trucks because a loan would be ridiculous... we're looking at a million for ten [vehicles]." (Micro Business, More than 5 HGVs)

"I think if we were credit checked, although we are very good and pay for everything, I think they would look at our books and say you haven't got enough money to do it." (Micro Business, More than 5 HGVs)

"It's alright taking finance out when you've got a steady income of work, but the way things are going, you could sign up for finance and then the company goes bust and you've lost your house. They want assurities, they won't lend you money... the last thing you want is something jeopardising your roof." (Micro Business, 1 HGV, Specialisms)

"It's no help whatsoever. We can go get our own finance like we already do... there's no saving to be had there." (Micro Business, More than 5 HGVs, Specialisms)

"Until you got the prices in front of you... then you can work out for yourself what's best." (Sole trader, 1 HGV)

"It's not likely we'll be able to do this, there isn't the time." (Micro Business, More than 5 HGVs, Specialisms)

Enablers and barriers to scheme uptake

6.2.3 HGV operators raised a number of points when discussing the scheme that would make them more or less likely to use the finance to upgrade their vehicle. These are summarised in Table 3 as enablers and barriers to the scheme, and are described under four key elements of the finance offering – the principle of finance and interest, deposit, repayment terms and eligibility criteria.

		Table 3. Enablers and Barriers to the	Finance Scheme
ASPECT C SCHEME	DF	ENABLERS	BARRIERS
		Whilst a 0% interest rate was requested by operators, others indicated varying rates between 1% and 3% - noting that the rate would have to be competitive with what is commercially available.	For other operators, any interest would put them off applying for vehicle finance, as would the thought of getting into debt. For sole and micro operators there
Principles of finance, including interest rates	of	There was a preference for a hire purchase type finance , rather than a long-term rental, as hire purchase would allow operators to retain the vehicle at the end of the agreement, providing a fiscal asset which would fund future replacements.	was also a concern that the amou they would have to borrow to cov the cost of a new vehicle(s) would unaffordable , especially alongsi concerns that Euro VI vehicles a likely to surge in price in light increased demand.
		Operators felt that vehicle maintenance would be included in the costs of the finance, as this is sometimes available through commercial finance contracts.	Other operators did not want maintenance to be included in finance contracts as they have a good relationship with a trusted engineer/service partner or complete their own vehicle MOT and servicing.
		Case Study 7. Micro Business in Sal	ford, providing buildings services
		As a third-generation, family business, ope years, this operator owns all of their secor	-

replace each vehicle on a schedule.

For them, financing all of their vehicles would likely require a deposit of £48,000 which is not affordable for the business. This is because the business usually makes a £30,000 annual profit. To acquire a sum of £48,000, this operator would need 4 or 5 years to save annual profits.

They also do not have the finances to support monthly repayments, with interest. They indicated they work a 90 hour week, roughly equating to £3 an hour, which has to support two generations of family. There is not enough money within the business, or within personal finances to support additional overheads.

"If the government were gonna offer something and they were actually gonna help you, it should be interest free." (Micro Business, More than 5 HGVs, Specialisms)

"I feel like if it's one of those [vehicles] that you have to give it back, you're wasting money... it's like renting a house. It's dead money... it gives me a minimum of £10,000 deposit for the next one." (Micro Business, More than 5 HGVs)

ASPECT SCHEME	OF	ENABLERS	BARRIERS
Deposit		 Having a deposit covered, in part, by the sale or scrappage of their current non-compliant vehicle(s), with additional money sourced from within the business, was viewed as essential for operators to be able to consider the finance option. A 0% deposit option was viewed as preferable. Furthermore, a 5-10% deposit contribution was considered an enabler to upgrade by some, with operators noting that it would alleviate some of the burden of upgrading to a compliant vehicle. 	Operators suggested that their current non-compliant vehicles may be worth much less money with the arrival of the CAZ, meaning their sale or scrappage would not be able to cover much of the deposit. This concern, in addition to tight business budgets, meant deposits were often viewed as unaffordable . A 5-10% deposit paid for operators was considered insufficient by some operators.
 "5-10% is a shot in the arm, it does alleviate a bit of the cost." (Small Busine than 5 HGVs, Specialisms) "The sale of scrappage of our non-compliant vehicles will probably not get all we're looking at a deposit of £100,000 do you know how much I've the bank account at the moment? £17,000 we'd have to take a loan to the deposit of the vehicles." (Micro Business, More than 5HGVs) "5% of the overall cost would be negligible, it wouldn't make much of a diff (Micro Business, 1 HGV, Specialisms) 			vehicles will probably not get much at do you know how much I've got in we'd have to take a loan to pay for , More than 5HGVs)
Repayme terms	nt	Operators expressed that finance repayment periods would need to be flexible , to suit their financial situations, use of the vehicle, and to be tailored against the age of the vehicle being financed, i.e. operators would not want to finance a 2015, second- hand Euro VI for 10 years as it would likely need replacing within the 10 year repayment period. Some suggested repayment terms of a few months , with the option of a large final payment upon exiting the term. For others, a 10 year repayment period was viewed as an enabler, allowing them to spread the costs of the vehicle over a longer timeframe, making the upgrade cost-effective.	A long (10 years) repayment term was also considered a key barrier to uptake, especially by those who may retire in the next 10 years, and would not want to keep paying afterwards. There was concern that CAZ compliance standards may change again in the near future and operators did not want to be tied into long finance contracts, as this may hinder their approach to future upgrades. Operators asked for guarantees on CAZ compliance standards staying fixed during their finance term.

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"That's a very long time to have a vehicle for, 10 years. If they financed, at an affordable rate, a brand new vehicle then for ten years, you would be fine. But, if they say, we're only financing a 16 plate, then I would only think, 'oh, I'm only going to get 6 years out of that'... finance for 10 years on an older vehicle wouldn't be worth it because you wouldn't be getting your money's worth. You'd probably have to replace your vehicle before them ten years." (Micro Business, More than 5 HGVs)

"Ten years scares the living daylights out of me because I'm 57 this year so ten years means I'm taking on a loan till I'm 67." (Micro Business, More than 5 HGVs)

"Being locked up for 10 years might give us an issue... if I do choose to retire early. We'd be look for 6-8 years." (Micro Business, 1 HGV, Specialisms)

"I'd probably only be looking for 3 years because I wouldn't want to sign myself up for that long... I'd be 50... in this job, you can't plan that far ahead." (Sole trader, 1 HGV)

"Over a long term, that's a good thing. It might make it cost effective for us but, are we gonna take a loan out and five years down the line are they gonna say the Euro VI is no good? Are they gonna guarantee that they're not gonna bring in a new emissions standard before that ten year is up." (Micro Business, Between 2-4 HGVs, Specialisms)

	Operators felt there should be no	Strict eligibility criteria would form a key barrier to uptake of the finance measure. Specific concerns were raised over the requirement for credit checks , with operators suggesting that
Eligibility criteria	credit check . Instead, finance should be provided following a review of alternative criteria. Examples included operators showing that their tax and national insurance has been paid.	they will unfairly disadvantage sole, micro and small businesses.
		Furthermore, one operator raised concerns for the requirement to have a valid MOT to be eligible for the vehicle finance. This was relevant as they run a specialised vehicle which is exempt from MOTs.

<u>SYSTIA</u>

ASPECT OF SCHEME	ENABLERS	BARRIERS
	Case Study 8. Sole Business in Manchester City, providing general haulage services As an owner-driver who is loyal to one customer, this operator runs on very tight finances to remain competitive. This also often means that they have quieter work periods, working as and when their customer requires. For these reasons, this operator believes that they will not be able to pass credit checks for vehicle finance. They liken this to trying to get on the property ladder.	
(This operator suggests that the requirement for credit checks should be removed, with operators only needing to show an alternative, such as national insurance contributions.	

- 6.2.4 The feedback from operators reflects that a finance scheme is likely to provide little incentive for operators to upgrade, unless it can provide a level of support which is not available through commercial finance schemes. This would be achieved through:
 - Little to no interest being payable;
 - Little to no deposit being required;
 - A flexible repayment period; and
 - No requirement for credit checks.

Anticipated behavioural response

- 6.2.5 After a detailed discussion on the scheme, some operators expressed interest in **investigating** the vehicle finance scheme to upgrade their non-compliant vehicle, whilst others suggested that they would not investigate the scheme.
- 6.2.6 Those that **anticipated investigating** the finance scheme:
 - Provided caveats that they would require more information on the terms of the finance in order to come to a concrete decision;
 - Suggested that they already use finance; and
 - Thought they could reduce the loan amount by just financing an upgraded chassis and keeping the existing vehicle body.
- 6.2.7 Those that **felt it was unlikely** they would investigate or take up the finance scheme:
 - Expressed concern over getting into debt and the amount of finance required;
 - Considered themselves ineligible; or
 - Noted that they would not be able to afford any deposit.



"We don't know what's being offered in pound notes and actual reality... we need something sooner or later than to go to the 11th hour." (Small Business, More than 5 HGVs, Specialisms)

"We would have to take the bodies off them and just buy the chassis and use the bodies that we got. That would save some money. But, what will we get for a Euro V chassis?...I think it's probably a more viable option than paying the £100 a day." (Micro Business, Between 2-4 HGVs, Specialisms)

6.3 Vehicle renewal scheme

Initial response to scheme

6.3.1 Participants were presented with the following information on the Vehicle Renewal Scheme:

Drivers and operators of non-compliant HGVs licensed in Greater Manchester for at least 12 months, could apply for financial support to upgrade to cleaner vehicles.

Subject to government approval, this could include the following amounts per eligible HGV:

- £16-18k for retrofitting; and
- £5.5k for a replacement.

Vehicles must have a valid MOT and road tax at the date of application, and funding must be used to: replace the vehicle with a compliant new or second-hand vehicle; or retrofit with an approved retrofit solution.

- 6.3.2 Initial reactions to the scheme were generally positive, with operators suggesting that:
 - The scheme was **preferable** to the vehicle finance scheme, especially for operators who usually purchase their vehicles outright and who do not want or cannot afford (additional) debt; and
 - The vehicle renewal scheme grant would **provide them with help** towards an upgrade.
- 6.3.3 As with the vehicle finance scheme, operators noted that:
 - More information is required to enable comment on the vehicle renewal scheme, particularly on whether they would anticipate taking up the scheme; and
 - More time is required to enable them to prepare for the introduction of the vehicle renewal scheme and to find a suitable vehicle.



"[The Vehicle Renewal Scheme] is more interesting to me than the finance option because we tend to avoid finance if we can." (Micro Business, 1 HGV, Specialisms)

"Any free money would encourage you. It will always help you." (Micro Business, More than 5 HGVs, Specialisms)

"At least there's an offer there, but all you can do is wait and see what the figures are and whether you can afford it and whether it is a good scheme and whether you can find it better yourself." (Sole trader, 1 HGV)

Enablers and barriers to scheme uptake

6.3.4 HGV operators raised a number of points when discussing the vehicle renewal scheme that would make them more or less likely to use the scheme to upgrade their vehicle. These are summarised in Table 4 as enablers and barriers to the scheme, and are described under the options to either retrofit or replace a non-compliant vehicle.

follows: The financial contribution to retrofitting tended to be viewed positively as it was thought to cover the majority of the corts of a retrofit the majority of the corts of a retrofit						
follows: The financial contribution to retrofitting tended to be viewed positively as it was thought to cover the majority of the costs of a retrofit	VEHICLE	ENABLERS	BARRIERS			
RetrofittingFurthermore, retrofitting was seen to allow operators to keep their current vehicle which was viewed positively, as: the maintenance is known to be affordable; the vehicle still has value; and the vehicle requires specialised equipment or branded bodies which are expensive to replace in full.other parts will begin to fail an the vehicle will become mor costly to maintain than it monetary worth; andOOperators outlined multipl problems with the mechanics t be retrofitted, including i relation to Adblue systems an vehicle exhaust filters, as well a ongoing maintenance wit software.OOperators suggested that retrofits should only be provided by trusted suppliers.	Retrofitting	retrofitting tended to be viewed positively as it was thought to cover the majority of the costs of a retrofit. Furthermore, retrofitting was seen to allow operators to keep their current vehicle which was viewed positively, as: the maintenance is known to be affordable; the vehicle still has value; and the vehicle requires specialised equipment or branded bodies which are expensive to replace in full. Some operators suggested that retrofits should only be provided by	 Retrofits were not thought to be available for Euro IVs or Vs; Retrofits were viewed as a waste of money for older vehicles as other parts will begin to fail and the vehicle will become more costly to maintain than its monetary worth; and Operators outlined multiple problems with the mechanics to be retrofitted, including in relation to Adblue systems and vehicle exhaust filters, as well as ongoing maintenance with software. Operators also anticipated a surge in the price of retrofitting, in response to the 			



Case Study 9. Small Business in Wigan, providing general haulage services

As a small business with 30 HGVs, this operator has started to replace their vehicles in anticipation of the CAZ. They currently have two thirds of their fleet at Euro VI standard, with the remaining HGVs being Euro V. These purchases were made outright. The business is now financially restricted for future upgrades and would require support.

However, this operator holds concern over the financial support to retrofit non-compliant HGVs, noting that there is no retrofitting currently available for Euro Vs. They also suggest that spending £16,000-£18,000 on a vehicle that is 5-6 years old would be a waste of time and money as other parts will begin to fail and the vehicle will become more costly to maintain than its monetary worth and the money that has been spent on the retrofit. They would rather have £18,000 toward a brand new replacement vehicle.

"They're just replaced now with Euro V and you're now asking them to replace four years later with Euro VI, and it isn't cost effective. There isn't a retrofit either. So it's like having all these big ideas but we haven't got a solution." (Small Business, More than 4 HGVs, Specialisms)

"I've looked into retrofitting... but my trucks are old at the end of the day and you'd have to look into whether they could even be retrofitted. But the fee for retrofitting, if it is £20,000 to retrofit, you'd be talking £2,000 per truck which is a hell of a lot different from a million [for a full upgrade]... it looks more feasible but from an economical point of view, would it be more sensible to do that for vehicles that really only have a couple more years." (Micro Business, More than 5 HGVs)

"We wouldn't be spending £18,000 on a vehicle that is 5-6 year old. We would sooner have £18,000 on a new truck." (Small Business, More than 5 HGVs, Specialisms)

"The prices will be going through the roof because everyone will be wanting them so they won't be coming in at normal price." (Micro Business, More than 5 HGVs)

SYSTIA

TYPE OF VEHICLE RENEWAL	ENABLERS	BARRIERS
Replacement	The financial contribution to replacing their non-compliant vehicle tended to only be viewed as appropriate for the replacement of older vehicles with second-hand compliant vehicles. The funding was expected to be used in conjunction with the sale or scrappage of the non-compliant vehicle.	However, the replacement contribution was not thought to be enough for a full vehicle upgrade, especially in comparison to retrofit contribution. Operators tended to feel that these values should be swapped around or that up to 50% of the vehicle value should be provided as a grant. This was especially true in light of concerns over the value of Euro VI vehicles, with operators anticipating a surge in the price and waiting lists for Euro VI vehicles, as demand increases and as the UK leaves the European Union, due to changes to manufacturing exports.

"5 and half for a replacement vehicle is nothing." (Micro Business, More than 5 HGVs)

"Five and half thousand is nothing when it comes to your wagon. That won't even touch the surface, so I don't think it will help in the slightest... you've still go to borrow the rest of it and pay it back and we're not making the money to do that." (Small Business, More than 5 HGVs, Specialisms)

"£16-18k, that sounds like a lot of money per vehicle to retrofit an exhaust... you could go buy a Euro VI chassis for that, second-hand." (Micro Business, More than 5 HGVs, Specialisms)

- 6.3.5 Another, more general enabler to the vehicle renewal scheme was an **increase in the amount of money on offer**, either to retrofit or replace a non-compliant vehicle. One operator suggested that the provision of a grant should be 'means tested', based upon business income, and likened this to the maintenance grants which were once provided by the Student Loans Company.
- 6.3.6 Other, more general barriers to the vehicle renewal scheme were:
 - A concern from operators that **CAZ compliance standards may change again** in the near future, meaning additional upgrades will have to be made. Operators asked for guarantees on CAZ compliance standards staying fixed; and
 - The vehicle renewal scheme was **not viewed as an option for leasers** who would have no residual value on vehicle they are currently leasing and therefore will be unable to make up the rest of the funds for an upgrade, despite financial contributions.



6.3.7 Overall, the feedback from operators reflects that a vehicle renewal scheme is likely to provide an incentive for operators to upgrade if the money provided can cover the majority of the upgrade costs, in conjunction with the sale or scrappage of operators' non-compliant vehicles. Furthermore, operators require reassurance on the availability and reliability of retrofits and new vehicles, as well as any requirement to scrap not having significant impacts on their business operations. This is discussed in more detail below.

A note on scrappage

For some operators, the requirement to **scrap** their non-compliant vehicle would **prevent** them from taking up the 'vehicle renewal scheme' as a private sale was anticipated to extract much more value which they would require to help them upgrade. There was some recognition that a private sale may mean a displacement of the air pollution problem, with many non-compliant vehicles being exported abroad.

Additional **concerns** included:

- Scrappage would mean getting rid of valuable vehicle parts which they would prefer to keep. One operator suggested that they would remove these parts prior to scrappage; and
- Scrappage may mean trading in a vehicle soon after an application for financial support, meaning they may be without vehicles as they source a replacement, which was seen as a risk to their business.

For others, the 'vehicle renewal scheme' was seen as effectively a **scrappage scheme**. In this instance, operators suggested that they would expect a replacement contribution tailored to the age of the vehicle being traded for scrap, with newer vehicles receiving a higher value.

"[If we had to scrap], it would depend on what you were gonna get on the scrap allowance, it's whichever would be the most viable. For instance, if you would only get £3,000 scrappage, but you could draw £5,000 to sell it, you'd want to go that route." (Micro Business, Between 2-4 HGVs)

"If I had to scrap, I wouldn't have a vehicle would I?...can I run your vehicles whilst [the application process] is happening or does it all have to be done by the date it comes into play?" (Micro Business, More than 5 HGVs)

"If the vehicle was 10 year old and they would give you £5,000 for it, to go toward a new one then fine...sooner or later you have to replace that vehicle...but on 6, 7 year old, we'd be looking for a bit more than that if we were to trade in...we're only doing short mileages." (Micro Business, More than 5 HGVs, Specialisms)

Anticipated behavioural response

6.3.8 After a detailed discussion on the vehicle renewal scheme, operators expressed interest in **investigating or taking up** the scheme to upgrade their non-compliant vehicle, on the assumption that the money received would cover the majority of the costs required:

- To upgrade to a replacement vehicle, in conjunction with the value extracted from their non-compliant vehicle; or
- To upgrade their current vehicle via a retrofit.

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6.3.9 However, others rejected this idea due to a concern that the renewal amounts would not be sufficient enough to enable an upgrade.

6.4 The application process

6.4.1 For both financial support measures participants anticipated an online application for the financial support, provided by TfGM, as TfGM have knowledge of the CAZ and are viewed as responsible for the introduction of it and its impacts.

"One presumes you would go online and fill a form in and sign a declaration to say 'this is the vehicle, I own the vehicle and here's what I'm buying and here's the confirmation that I bought one', and it would go on like that and they would pay the money to a company bank account... we would want a decision on quote... with the money paid out on registration." (Small Business, More than 5 HGVs, Specialisms)

"I'd do it online through Greater Manchester because they know what they're talking about don't they... you'd like to think that Greater Manchester transport are there for you but if you start going out to some outside company, no disrespect, but some are not that genuine, they're out for themselves. They're adding their money on to it." (Micro Business, More than 5 HGVs)

- 6.4.2 There were some concerns over TfGM providing financial support, namely regarding whether TfGM would have the money to finance the financial support and whether they may underwrite loans for dubious operators, undermining others' ability to borrow.
- 6.4.3 In contrast, some operators anticipated funding being available through a **third-party**.

"I can see where it can benefit operators but...you've got quite a lot of unscrupulous operators, that could take the finance and decide that they are going into liquidation. Do you not think it would leave a big black hole? There could be complications." (Micro Business, Between 2-4 HGVs)

"They'll be handing that finance package to a company, the government wouldn't be financing it themselves." (Micro Business, More than 5 HGVs, Specialisms)

- 6.4.4 A number of suggestions were made to ensure that the application process for financial support is fair, including:
 - The application process opening soon to ensure that operators have as much time as possible to upgrade before the CAZs introduction in 2021;
 - The application process being quick, with operators noting that long waiting lists for CAZ compliant vehicles may make the application process slow;
 - Operators being exempt from the CAZ charge upon application for financial support, with operators acknowledging that they would need to run their vehicles after applying for financial support in order to continue their business; and
 - A suggestion that operators gaining access to compliant vehicles through the scheme should be prohibited from re-selling them in order to reduce inflation.

"We would need this before [the CAZ] came into play, to stop us paying £1,000 a week." (Micro Business, Between 2-4 HGVs, Specialisms)



6.5 Impact of financial support measures on views to CAZ

- 6.5.1 After discussing the two indicative financial support scenarios, HGV operators' views toward the CAZ fell into three categories:
 - Some recognised that air pollution is a problem across Greater Manchester and that the CAZ could be a suitable solution;
 - Some remained negative toward the CAZ, suggesting that the financial support measures provide no incentive to upgrade to a compliant vehicle and so the zone would still have significant impacts on their business; and
 - Some suggested that the availability of the financial support measures made them feel more reassured on the impacts of the CAZ as they may provide some opportunity to become compliant.

"It's one of these things that's got to be tackled, I can understand that...if [the finance] gives people an option to finance new vehicles at a lower cost, it could have some positive implications." (Micro Business, 1 HGV, Specialisms)

"It's an incentive. We'd love nothing more than to drive around in new trucks so this helps achieve that, it's a good thing." (Small Business, More than 5 HGVs, Specialisms)

"If we're going to get help, obviously, it's a bit more reassuring." (Micro Business, Between 2-4 HGVs, Specialisms)

6.6 Other incentives to upgrade

- 6.6.1 During discussions on the two financial schemes to incentivise vehicle upgrade, participants raised suggestions for other incentives which could be introduced to help minimise the negative financial impact of the CAZ on operators, and encourage them to upgrade their vehicles. These included:
 - Extending timescales for compliance, with suggestions of up to 5 years, based on company size, income and/or fuel use. Operators, especially micro businesses, suggested that this would allow:
 - Operators longer to save toward an upgrade, especially those who currently own their vehicles outright or who have more than 5 HGVs;
 - Operators to upgrade their vehicles within their normal upgrade procedures, some of which suggested would be more environmentally friendly, perceiving that their normal upgrade procedures would reduce the emissions resulting from increased demands on manufacturing or from vehicle scrappage;
 - For Euro VI costs to decrease;
 - To provide TfGM with more time to prepare for the implementation of the CAZ; and
 - More time for operators to recover from the impacts of Brexit uncertainty and the 2008 recession.



"I think the timescale is unfair. If they'd came and said five years' time then we could get a bit of money back on the vehicle... that's not too bad... you would be looking to replace your vehicles in that time and you could budget... but, next year, that's ridiculous." (Micro Business, 2-4 HGVs, Specialisms)

"If they said you can't use Euro V in 5 years. Vehicles can earn their money in the delay time... you're being given a fair opportunity to adjust your business, a fair timescale." (Micro Business, More than 4 HGVs, Specialisms)

"It's not likely we'll be able to do this, there isn't the time... like I say, if you said you have a few years." (Micro Business, More than 4 HGVs, Specialisms)

"It's too much too soon, and we'll need more time." (Small Business, More than 4 HGVS)

"If you were to say you'd bring this in in 2026 then, realistically, you could probably be well and truly updated by then." (Micro Business, More than 4 HGVs)

"I've even looked at if we were to get an exemption and go for another 5 years, and replace them as we could but unless the costs of them come way down, I don't know how we do that either... eventually all the guys who have Euro VIs at some point will want to upgrade to the next one, when they come on the market and they are of a price we would normally pay, in about 5, 6 or 7 years' time when we would be looking to upgrade, they would be within our budget reach." (Micro Business, More than 4 HGVs)

• A graduated charging structure, with higher daily CAZ charges in the city centre. This was considered as an incentive to upgrade as operators would be able to save for upgrades, and would likely be able to pass on lower, outer city charges on to customers with little impact on competition;

"We were thinking it was just Manchester [city centre] and if you had to go into Manchester it would be an extra £10 a day, that's liveable... but when you start talking £100 a day for Greater Manchester!? ... I think it should be, when you get into the inner city, there should be something like a £20 charge for commercials, or a £10 charge... that would be more of a fairer way... if they had a scheme that said, you've got the option to upgrade or pay £10-20 a day, you would be thinking... if you had £6,000 to upgrade your wagon and they gave you £10,000 to upgrade with the option to upgrade later to Euro VII wagons... then you've got to turn round and think...look at the options." (Micro Business, 1 HGV, Specialisms)

- An **exemption for the £100 daily charge**, based on business size, financial position and distanced travelled. This would enable operators to continue with their business;
- TfGM should **reassure operators** that the compliance criteria is not going to change again in the near future to include Euro VII standards when they are introduced;

"The next thing that people are worried about is that everyone is gonna give up Euro VI and then Euro VII is gonna come out so then we'll go through the same again. It would be disheartening. You just have to keep adjusting your business all the time. It's taking money off you all the time." (Micro Business, More than 4 HGVs, Specialisms)



• TfGM should do more to **tackle congestion** to ensure that hauliers can make more efficient journeys, thereby reducing their pollution impact and providing them with more money to upgrade;

"We are having a heavy cost by the congestion on the roads...the congestion has been caused by the local authority...they haven't kept the traffic moving...if they want to restrict the number of cars on the road, they can do it in other ways, like reducing car parking spaces." (Small Business, More than 5 HGVs, Specialisms)

- Government intervention for **discounts on compliant vehicles**. This could be working with specific manufacturers to offer a discount at point of sale, and, if this is not agreed, limiting the number of vehicles allowed on the road by each manufacturer to ensure that they cannot have a monopoly over prices; and
- TfGM should operate a **vehicle scrappage scheme** that would allow hauliers to trade in non-compliant vehicles and extract their 'true' monetary value, before the CAZ was proposed, which operators likened to the London scrappage scheme.



7. CONCLUSIONS

7.1 Response to the Clean Air Zone

- 7.1.1 Vehicles used by sole, micro and small HGV operators tend to be purchased second-hand, and, when up for replacement, are sold on to fund, along with business savings, the purchase of the replacement vehicle. Businesses operate on tight margins with vehicle upgrades built into business plans.
- 7.1.2 Upgrading vehicles takes years to budget for and plan the purchase, and there are concerns that suitable vehicles will not be available in the CAZ timeframe due to increased demand. Operators cannot afford to 'pay to pollute', however nor can they afford to upgrade their vehicle(s) without a suitable timeframe to plan and budget in.
- 7.1.3 Financial support is welcomed by operators and necessary to assist operators upgrading to cleaner vehicles. Vehicle finance, either privately or supported by TfGM, is not considered an attractive option, particularly for those whose existing vehicles are not purchased through finance, and take up of this option appears likely to be low.
- 7.1.4 Financial support for upgrading or retrofitting is more welcome. Retrofitting younger vehicles is an attractive option, although there is a distinct lack of clarity over which types of vehicles could be retrofitted. Financial contributions to the cost of upgrading vehicles appears to be essential in encouraging operators to purchase a compliant vehicle within the CAZ timeframe.
- 7.1.5 However, even with financial support, not all will be able to adapt and there is significant risk that operators will be put out of business, impacting families and employees; as they are as equally unable to absorb the cost of the charge into their business or secure the capital required to upgrade, even with assistance.
- 7.1.6 To minimise the risk of putting sole, micro and small HGV operators out of business, TfGM could consider:
 - Making the smallest of operators exempt from the charge, on the basis that fewer miles are completed by their vehicles than larger operators and/or their vehicles are specially adapted and therefore harder to replace;
 - Making the smallest of operators temporarily exempt from the charge, as an additional few years to plan and budget was considered a far more workable adaption timeframe and more fitting with natural lifecycles of vehicles; or
 - Making the smaller of operators temporarily exempt from the charge, whilst offering financial support to encourage upgrades as soon as possible.

7.2 Incentivising Upgrade

- 7.2.1 To incentivise upgrade to cleaner HGVs, the proposed financial support measures could be made be more appealing to operators. Suggestions for consideration include:
 - Offering finance terms more attractive than available privately, including lower interest rates, lower deposit requirements, a flexible repayment periods defined by the operator, alternative arrangements to credit checks;
 - Increasing the financial support available on the vehicle renewal schemes, particularly for vehicle upgrades to fall more in line with a deposit cost for a HGV;



- Remove the requirement for vehicles to have a valid MOT, as some adapted vehicles are exempt from requiring an MOT, and this would prevent access to the support.
- 7.2.2 A number of operators are required to use adapted vehicles, making them highly specialised, meaning replacement has additional cost and timescale implications, adding further need to consider the role of (temporary) exemption.
- 7.2.3 Operators would also benefit from reassurances that the compliance standards will not change in the future, so the upgrade can be considered a longer-term investment.
- 7.2.4 Financial support applications should be made available as early as possible, with a clear notice period, as there is some evidence that operators may be deferring upgrades whilst they await clarity on the CAZ and support measures. Other operators may inadvertently upgrade to a non-compliant vehicle shortly before the introduction of the CAZ, adding additional financial implications to their business.

7.3 Thoughts on next steps

- 7.3.1 There was considerable concern amongst operators that the supply of compliant HGVs would not meet demand, in line with the CAZ timescale. A market review to assess the supply of compliant vehicles in both the new and second-hand market, and how the CAZ could impact this by inducing demand, could be undertaken. This could be used to create suitable timelines by which it is reasonable for the industry to adapt, if necessary.
- 7.3.2 Should exemptions be a possibility, the basis and definitions of these could be further explored. For instance, exemptions could be based on business size (defined by number of employees), number of HGVs owned/operated by a business and/or vehicle adaptations, and/or average mileage per business or vehicle.

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Appendix A – Topic Guide

Transport for Greater Manchester Reference number: 109038 15/01/2020

GREATER MANCHESTER CLEAN AIR PLAN -RESEARCH PART 2: INTERVIEWS WITH SOLE AND MICRO TRADERS OWNING/OPERATING HGVS

TOPIC GUIDE





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INTRODUCTION [5 MINS]

1.1 Explanation of research purpose

- Interviewer to introduce self and SYSTRA an independent research agency.
- The research is being conducted on behalf of, but independently from, TfGM, and is independent from the RHA, FTA or Greater Manchester Freight Forum [if recruited via these organisations].
- Aim of research is to understand:
 - Existing and possible future purchasing behaviours of sole and micro traders owning/operating HGVs;
 - How sole and micro traders owning/operating HGVs would interact with the proposed Greater Manchester Clean Air Zone (CAZ), including how it would impact their business; and
 - The reactions and thoughts of sole and micro traders owning/operating HGVs regarding measures which may help to reduce the impact such as funds and vehicle finance offers, including how they would prefer to access support.
- The findings will be used to inform refinements to the Clean Air Plan.
- A wide range of organisations owning and operating HGVs are being spoken to as part of the research, across the Greater Manchester region.

1.2 Explanation of interview session

- Interview to last up to 45 minutes.
- Structure of questions:
 - Your organisation's fleet purchasing behaviours;
 - Your thoughts on the Clean Air Zone proposed as part of the Greater Manchester Clean Air Plan; and
 - Your thoughts on a variety of funding and finance mechanisms aiming to support HGVs.
- Everything you say will remain confidential and no personal data or identifiers will be passed on to TfGM or any third party.
- You are able to end this interview at any point and do not have to answer any questions you do not want to.
- The research is taking place in accordance with the Market Research Society Code of Conduct and the General Data Protection Regulation (GDPR).
- As you will have seen in the email we sent you, this session will be recorded. Recording will only be listened to by the SYSTRA project team to assist interview write ups, and will be destroyed by June 2020.
- Once interviews are completed, the data will be amalgamated and the results will be analysed and reported on anonymously.

As a thank you for your time we will be providing you with £40.

• Do you have any questions before we begin?

PURCHASING BEHAVIOURS [10 MINS] [KEEP THESE DISCUSSIONS VERY SHORT!]

2.1 Current HGV use [2 mins]

- Could you tell me a little bit about your business and how you use HGV(s)?
 - How important is HGV use to your business?
 - How many HGVs does your business own?
- How often do you use your HGV(s)? Daily, weekly, monthly etc
 - Do you only travel within Greater Manchester, or do you travel to other areas? If so, which areas and how frequently?

2.2 Current Buying Behaviour [5mins]

- Does your organisation **own** your HGVs, **lease** them or something else? Why?
 - If owned, do you own them **outright** or on **finance**? How much longer on the finance?
 - If leased, how long is the lease? What are terms for exiting the lease?
- How does your organisation finance purchases of its HGVs? Why?
- Where does your organisation purchase its HGVs from? Why?
 - In/beyond Greater Manchester? In/beyond UK?
- Thinking about your business as a whole, how do you make purchasing and selling decisions regarding your HGV(s)?
 - What age vehicle does your organisation usually purchase? Why?
 - How long do you usually keep the vehicle for? Why? Based on age, mileage, something else?
- What does your organisation do with **previous vehicles** when new ones are purchased? Why?
- O Does your organisation use any specialised HGVs (i.e. freezer units, large skips, cranes)?
 - [If yes] Did you purchase it as it is now, or did you adapt it? If so, how much did it cost/what proportion of the vehicle cost was the adaptation?
 - What are they? What age vehicle does your organisation usually purchase?
 - Are there **specific considerations** you have to make when purchasing a specialised vehicle? What are these? Are they as **available** as other vehicle types, or are there waiting lists etc?
 - What does your organisation do with **these specialised vehicles when new ones** need to be purchased? Why?

2.3 Anticipated future buying behaviour [5 mins]

- After **how long** does your organisation usually **replace** its HGVs? Why?
 - What do you think the next replacement will be? Why? (i.e. based on spec/availability/other)
 - How will your organisation finance this? Savings? Residual value? Loan? Other? Why?
 - Where will your organisation purchase the new HGV from? Why?
 - What will your organisation do with your current vehicle? Why?

IMPACTS OF AND REACTIONS TO THE CAZ [15 MINS]

2.4 Views on air pollution in Greater Manchester [2 mins]

• To what extent do you think air pollution is a problem in Greater Manchester?

2.5 Views on CAZ [10 mins]

Showcard 2-5: Provide an overview of the key aspects of the CAZ, particularly compliance criteria

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- What do you **think** about this proposal? Why?
- What **impacts** will a Clean Air Zone have:
 - On you/your organisation? Why?
 - More widely, i.e. beyond you/your organisation? Why?
- [Unprompted] In 2021, how are you/your organisation likely to **respond** to the implementation of a Clean Air Zone?
- [Prompted using show cards for participant to move around/rate/rank] Will you...

Behavioural Response	Prompt	
	Why will you do this?	
Pay the charge	How long for?	
Fay the charge	How will you finance the charge?	
	Will you change anything else?	
	Why will you do this?	
	When would you look to do this?	
	Would you start by paying the charge? Why?	
Change to a compliant	What type of vehicle? Why? Prompt on specialised vehicles, if applicable	
vehicle/multiple compliant vehicles	Would you have bought a compliant vehicle before 2021 anyway?	
(e.g. vans)	Would the CAZ mean buying a vehicle sooner than you otherwise planned?	
	How would you finance the vehicle? Why?	
	How much will it cost you?	
	What will you do with your current vehicle ? Would you do this anyway if the	
	CAZ didn't exist? [If selling] How and where would you sell it?	
Lice vehicle loss frequently	Why do you think you will do this?	
Use vehicle less frequently	What impact would this have on you?	
Work in a different area (beyond	Why do you think you will do this?	
Manchester)	What impact would this have on you?	
Change profession/rotire	Why do you think you will do this?	
Change profession/retire	What other implications could this have for you?	

REACTIONS TO FINANCIAL SUPPORT MEASURES [20 MINS]

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3.1 Vehicle Finance [7 mins]

Showcards 6-8: Provide an overview of the key aspects of the Vehicle Finance measure

- What do you think about the Vehicle Finance measure? Why?
- How is your organisation likely to **respond to the availability of vehicle finance**? [Prompt only if required] Will you...
 - Take up this option and change to a compliant vehicle?
 - Why would you do this?
 - What would you use as the deposit? Trade in or residual value? Savings? A private loan? Other?
 - What kind of compliant HGV? Prompt on specialised vehicles, if applicable
 - Not take up this option? Why?

Prompt, if necessary:

- Do you have funds available to upgrade anyway?
- Prefer to own outright?
- Can't afford it/the deposit?
- Put off by application process?
- Don't believe are eligible for the option, under policy?
- Don't believe they will qualify for the finance, following an assessment/credit check?
- o Other reasons?
- Not sure? Why?
- Anything else? Why?
- What are the main factors that would **encourage** you to take up the vehicle finance? Why?
- What are the main factors that would **prevent** you from taking up the vehicle finance? Why?
- How would you prefer to access this finance? Why? If access was via an online portal, what key requirements would this need to have? Why?
- Have your views on the CAZ changed from our previous discussion?
 - Why have your views changed?
 - **How** have your views changed?
 - What specific information has changed your views?
- If the **conditions** of the vehicle finance varied (e.g. different time spans, lower deposits) would this impact your decision to take up/not take up the option?
 - How do you decide if a loan is affordable?
 - Do you: save up first; assess repayment terms; deposit amount; finance type; assess interest rates; none of these; other?
 - What aspects are most important to you when considering finance?
 - What would prevent you from accessing finance?
 - What would help you to access finance?
 - How does this finance compare to other finance offers you have come across, if at all?

• Finance with competitive market rates (prompt if required: 5% below market rate)

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- 20% deposit
- 10% deposit
- 5% deposit
- Different repayment periods 4, 6, 10 years.
- Interest rates?
- Options for finance types
 - Contract Hire long term rental with no ownership
 - Lease purchase with a lump sum (balloon) payment at end of term option to own
 - Lease purchase with no lump sum (balloon) ownership as outcome
- If the 5% deposit was paid for you, how would that impact your decision to take up/not take up the option? What about 10%?
- What are your **preferred conditions**? For each aspect: why? What makes this more preferable than the other conditions?

3.2 Views on Vehicle Renewal Scheme [7 mins]

Showcard 9: Provide an overview of the key aspects of the Vehicle Renewal Scheme

- What do you think about the Vehicle Renewal Scheme? Why?
- How are you/your organisation likely to **respond to the availability of the renewal scheme**? [Prompt only if necessary] Will you...
 - **Take up** this option and change to a compliant vehicle? Why?
 - What kind of compliant vehicle? **Prompt on specialised vehicles, if applicable**
 - What will you do with your existing vehicle(s)?
 - Take up to use as the **deposit** for the lease/finance support measure? Why?
 - Not take up this scheme? Why? Prompt, if necessary:
 - Don't want to scrap my existing vehicle/would lose money by scrapping my vehicle?
 - Put off by application process? Why?
 - Don't believe are eligible?
 - Not enough money?
 - \circ Other reasons?
 - What would be required to encourage you to upgrade your vehicle?
 - Not sure? Why?
 - Anything else? Why?
- What are the main factors that would **encourage** you to take up the vehicle renewal scheme? Why?
- What are the main factors that would **prevent** you from taking up the vehicle renewal scheme? Why?
- If you had to **scrap your vehicle** in order to get the fund would this change whether you would take the grant?
- How would you prefer to access this finance? Why? If access was via an online portal, what key requirements would this need to have? Why?
- Have your views on the CAZ changed from our previous discussion?



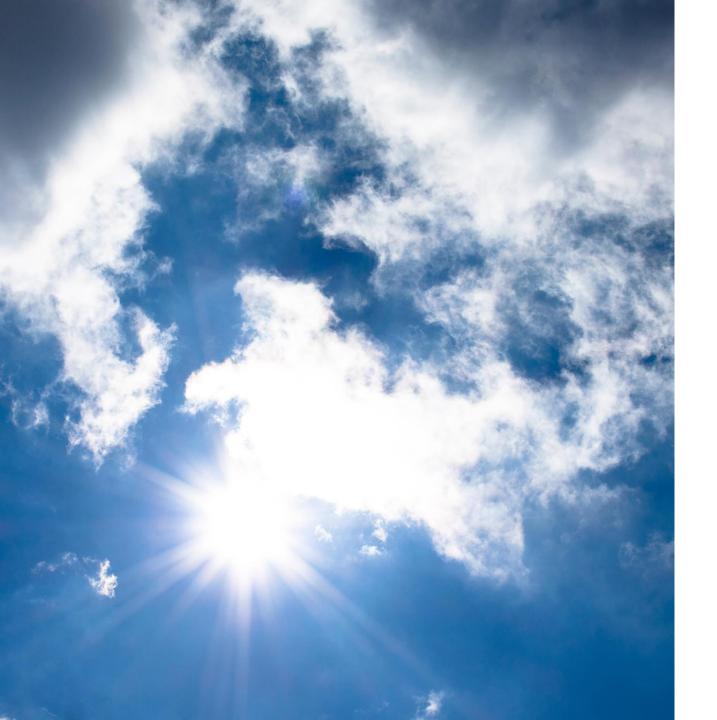
- Why have your views changed?
- How have your views changed?
- What **specific information** has changed your views?
- If the grant was **lower**, would this change your views? How?
- If the grant was **higher**, would this change your views? How?



3.3 Reflection and Priorities [4 mins]

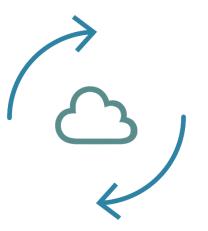
- Of the financial support measures we have discussed, which would be **most / least useful** to you? Why?
- Now we have discussed everything in detail, for the vehicle **finance scheme**, how would you summarise:
 - Level of support;
 - Likelihood to change vehicle; and
 - Impact of **funding options on views toward CAZ**.
- Similarly, for the **vehicle renewal scheme**, how would you summarise:
 - Level of support;
 - Likelihood to change vehicle; and
 - Impact of **funding options on views toward CAZ**.
- Considering both the vehicle finance scheme and the renewal scheme together, what do you think your **likely response** would be to the introduction of a Clean Air Zone? Why/what would it depend on?
- Are there any **other kinds of support** would you want to help you upgrade to a compliant HGV? Why?
- Are there any final comments you would like to make on anything we have discussed?
- Thank you for your contributions
 - o which are really valuable;
 - which will help TfGM Greater Manchester Combined Authority and local authorities understand the impacts of measures to reduce pollution in Greater Manchester, and how these can be minimised; and
 - which will be extremely important in helping with the development of the Clean Air Plan.
- [Distribute incentives]





Clean Air Plan HGV Interviews





Clean Air Zone





What is a Clean Air Zone?

• A Clean Air Zone covers an area of a city or region.

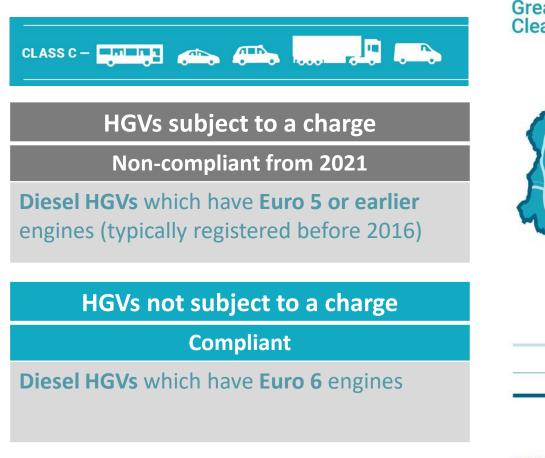


- It means that vehicles travelling into, within and through that area must comply with emissions standards or pay a penalty charge.
- Clean Air Zones operate **24 hours a day**, **365 days a year**.
- The goal of a Clean Air Zone is to encourage people to upgrade to a cleaner vehicle – the more people that comply and do not have to pay, the better.
- This is different to a Congestion Charge Zone where the aim is for some people to switch to other modes of transport, but most stay and pay – so drivers pay the cost they impose on others. Congestion Charge Schemes are very profitable.

What is proposed in Greater Manchester?



Greater Manchester is proposing a Category C Clean Air Zone across all local roads in GM from 2021.





Indicative daily penalty payments



The goal of daily charges is to reduce the number of polluting vehicles on GM roads.

The following charges have been **estimated** and are subject to **further development**, **consultation** and **engagement**.

Vehicle type	Daily penalty	PCN charge (additional to daily penalty)
Taxis / private hire vehicles	£7.50	£120
Vans, minibuses, motorhomes and motorised horseboxes	£7.50	£120
HGVs	£100	£120
Buses / coaches	£100	£120
Cars, motorbikes and mopeds	N/A	N/A

Vehicles subjected to the penalty who do not pay would be issued with a **Penalty Charge Notice (PCN)** and would be required to pay the original charge and the penalty charge.



Financial Support Measures



What help will you receive to upgrade to cleaner vehicles?

 Two indicative scenarios have been proposed to help pay for the scrappage or upgrade of the most polluting HGVs. These are:

 \odot Vehicle Finance

 \odot Vehicle Renewal Scheme





Vehicle Finance



- Drivers and operators of non-compliant HGVs licensed in Greater Manchester for at least 12 months, could apply for a finance to cover the full costs or lease of replacement cleaner vehicles. Finance contracts will likely be for terms of up to 10 years, with monthly re-payments.
- Finance will be subject to evidence of a **suitable deposit** and **credit checks** and will have a **competitive interest rate**. **Deposits** can come from the sale/scrappage of a non-compliant vehicle, from grant funding or from personal funds.
- Vehicles must have a **valid MOT** and **road tax** at the date of application and funding must be used to:
 - **replace** the vehicle with a compliant **new** or **second-hand** vehicle

Vehicle Renewal Scheme



- Drivers and operators of **non-compliant** HGVs **licensed** in Greater Manchester for at least **12 months**, could apply for financial support to upgrade to cleaner vehicles.
- Current proposals estimate that the following amounts would be available:

£16-18k for retrofitting £5.5k for replacement

- Vehicles must have a valid MOT and road tax at the date of application, and funding must be used to:
 - (a) replace the vehicle with a compliant new or second-hand vehicle
 - **(b) retrofit** with an approved retrofit solution

Thank you





Appendix C – Detailed Sample Profile

	Sole	4
BUSINESS SIZE	Micro	12
	Small	4
	Waste	1
	Removal	1
	General Haulage	12
SECTOR	Buildings	2
	Utilities	1
	Scrap Metal/Building Waste	1
	Other	2
	Bolton	5
	Bury	2
	Manchester City	3
	Oldham	2
DISTRICT	Rochdale	1
	Salford	1
	Stockport	2
	Trafford	2
	Wigan	2
	Crane	1
SPECIALISED VEHICLES (IF	Large skip	1
APPLICABLE)	Recycling / waste vehicle	1
	Other	6
	One	6
FLEET SIZE	Between two and four	3
	More than five	11