

**Taxi & Private Hire
Eco/Smarter
driving**

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Research conducted by Synovate

Executive Summary

The research on which this report is based was commissioned by TfL on behalf of PCO to explore awareness of eco smarter driving methods and views among taxi and private hire vehicle (PHV) drivers, taxi and PHV owners, and PHV operators. It provides a baseline against which the impact of future promotional activity can be measured. The findings reported here are based on:

- Qualitative research with larger taxi and PHV fleet owners (10+ vehicles): 4 x PHV owners and operators; 4 x taxi owners and operators
- Quantitative telephone interviews with 294 taxi drivers, 309 PHV drivers, and 85 PHV operators and 2 taxi owners. (Due to small base sizes taxi owners are not reported.)

The main findings are reported below:

PHV drivers are more open than taxi drivers to driving in a way that is good for the environment and to minimise fuel consumption

- Over nine in ten PHV drivers compared to over eight in ten taxi drivers agree it is important to drive in a way that minimises fuel consumption. Similarly, nine in ten PHV drivers agree it is important to drive in a way that minimises the impact on the environment, whilst seven in ten taxi drivers view this as important. Eight in ten PHV owners/operators say it is important that drivers drive in a way that minimises fuel consumption and that it is important that drivers drive in a way that minimises the impact on the environment.

This may be because PHV drivers are more likely than taxi drivers to acknowledge a link between petrol consumption, CO₂ emissions and climate change

- Seven in ten PHV drivers compared to five in ten taxi drivers agree there is a direct link between climate change and petrol consumption. PHV drivers are more likely to agree that there is a strong link between CO₂ emissions from cars and climate change, with just over seven in ten doing so compared to just fewer than six in ten taxi drivers. Among

It may also be because PHV drivers (and PHV owners/operators) are more likely than taxi drivers to believe they can make a difference to the environment

- Six in ten PHV drivers and PHV owners/operators agree they can make a difference to the environment, compared to less than half of taxi drivers.

Motivation to adopt eco smarter driving measures may be driven more by commercial reasons rather than environmental concerns

- Large fleet PHV and taxi owners/operators say they often take steps to introduce eco smarter driving measures for cost saving reasons and because they know their business account customers like them to have green credentials.
- When spontaneously asked why they think it is important to drive in a way that minimises fuel consumption, three in four taxi drivers and six in ten PHV drivers cite economic reasons. One in four PHV drivers and one in five taxi drivers cite environmental reasons. The pattern of response is similar among PHV owners/operators cite, with two thirds citing economic reasons and a third environmental.
- However, when asked why they think it is important to drive in a way that minimises environmental impact, although not significantly different, slightly more PHV drivers cite environmental reasons than taxi drivers (58% compared to 50%), though one in six taxi drivers wants to protect the planet for future generations. The latter view may be because taxi drivers tend to be older than PHV drivers so more likely to have children and grandchildren and think in these terms). Half of PHV owners/operators mention environmental reasons.
- There is however a minority of mainly taxi driver who think eco smarter driving issues are unimportant. This minority says they do not believe they can make a difference, that it is to difficult to drive in an eco smart way, or that they do not care about the issue.

Thinking it is important to drive in a way that minimises environmental impact may not necessarily translate into action

- Almost eight in ten PHV drivers say they always or usually drive in a way that minimises fuel consumption compared to seven in ten taxi drivers. Seven in ten PHV drivers say they always or usually drive in a way that seeks to minimise impact on the environment compared to six in ten taxi drivers. There is therefore a gap between thinking it is important to drive in such a way and actually seeking to drive in a way that minimises environmental impact. People are likely to over-report compliance with environmental messages, so actual levels of compliance may well be lower still (albeit any such over-reporting suggests that drivers know that they should be driving in an eco smart way). Overall, there is likely to be scope for a campaign to motivate greater uptake of eco smarter driving messages.

However, both PHV and taxi drivers say they know what they should be doing and are generally doing it, with some notable exceptions

- When prompted, around nine in ten taxi and PHV owners/operators, and drivers are aware of each of the main eco smart driving measures (i.e. avoiding accelerating hard and breaking sharply, avoiding leaving the engine running unnecessarily, servicing the vehicle regularly, keeping tyres inflated to the right pressure, minimising use of air conditioning, PHV drivers changing gear at lower revs).
- In terms of actually always or usually practising these smarter driving measures, around nine in ten taxi and PHV drivers say they always or usually keep their tyres inflated to the right pressure. Around four in five taxi and slightly fewer PHV drivers say they always or usually avoid sharp acceleration, avoid leaving the engine running unnecessarily, service their vehicle regularly, and keep the boot as empty as possible to avoid any excessive loads.
- However, only around half say they always or usually:
 - Avoid using their air conditioning to reduce fuel consumption

- While six in ten change gear at lower revs (PHV drivers only as the vast majority of black cabs have an automatic gearbox)

Taxi drivers are less likely than others to agree that PCO branding would be effective

- Only two in five taxi drivers think clear PCO branding of an eco smarter driving promotion will be effective, compared to around half of PHV operators and drivers and nearly six in ten PHV drivers.

PHV operators acknowledge they are an important source of information for their drivers

- Large fleet PHV operators agree that giving them information to pass on to their drivers is a good way of communicating messages across.
- Almost three in four PHV operators and PHV drivers think information given by operators to drivers will be effective. Two thirds of PHV operators and almost three quarters of PHV drivers are personally interested in receiving information in this way.

Taxi drivers want materials they can digest in their own time while workshops or training are of lower interest

- One in three taxi drivers spontaneously says that they think the taxi drivers' trade press would be an effective way of getting messages to them.
- Seven in ten taxi drivers think getting an information leaflet in the post would be effective, and seven in ten would be personally interested in getting information in this way. Seven in ten taxi drivers think a free DVD would be effective. Two thirds of them would be personally interested in getting information in this way. Around one in four taxi drivers thinks attending a four-hour workshop or half-hour training session would be effective. Only one in six taxi drivers is interested in attending a four-hour workshop, and only one in four is interested in a half-hour training session.

Although taxi drivers are less inclined to be open to driving in a way that is good for the environment and to minimise fuel consumption, they do not totally reject these ideas. Awareness of smarter driving techniques is high. In fact, taxi drivers are more likely to say they always or usually drive in a way that minimises stress on themselves and to their passengers than PHV drivers who tend to be more open to driving in ways that minimise the impact on the environment and fuel consumption.

Taxi drivers are just as likely as PHV drivers to be aware and just as likely to use smarter driving techniques. However there is a greater rejection of general environmental issues and those associated with driving. Taxi drivers are more likely to be career drivers than PHV drivers therefore there could be a degree of protecting their long term interests and perhaps more contemplation about the long term implications. Specifically less than three fifths of taxi drivers agree that there is a strong link between CO₂ emissions from vehicles and climate change, compared to seven in ten PHV drivers. Any smarter driving initiatives have to reflect the concerns of this group.

1 Background

The Mayor's Climate Change Action Plan 2007 (the Plan) sets a target to reduce CO₂ emissions across London by 60% by 2025. TfL is expected to play a leading role in delivering reductions in the transport sector.

Ground based transport is responsible for 22% of London's CO₂ emissions. Taxis and private hire vehicles (PHVs) account for 4% of the transport share. They put 0.5 million tonnes of CO₂ into the atmosphere annually. There are approximately 70,000 taxi and private hire vehicle drivers in London who carry some 500,000 passenger journeys per day. Consequently, measures are required to tackle carbon reduction from the taxi and PHV fleet.

National measures such as the Renewable Transport Fuel Obligation (RTFO) will lead to a small reduction in carbon emissions. However, it will not be sufficient to meet TfL's objectives. Local air quality emissions and noise control will continue to be tackled wherever practicable. On the 8 October 2007, the Managing Director of Surface Transport presented TfL's taxi carbon strategy to the Mayor of London. This covered proposals to:

- Introduce a smarter driving and eco maintenance campaign for the licensed taxi and private hire fleets.
- Set up a taxi development programme to produce approximately 10 prototype low carbon taxis for field trials and proof of concept.
- Develop mandatory measures to reduce taxi and PHV CO₂ emission as a condition of licensing.

These proposals were endorsed by the Surface Strategy Board in November 2007. The Climate Change Fund (CCF) approved £1.208m funding also in November 2007. Cenex has undertaken to provide further funding for the low carbon taxi project. A communications campaign is planned for April 2010. To accompany the campaign, 'driver champions' may be introduced, as well as the installation of logging equipment in certain vehicles.

There are a range of actions that taxi and PHV owners, operators, and drivers could be encouraged to take via campaigns, including:

- Driving techniques
 - Avoiding accelerating and breaking hard
 - Switching the engine off when idle
 - Changing gears at lower revs (PHV owners and drivers only)
- Vehicle maintenance
 - Making sure the vehicle is regularly services
 - Keeping tyres inflated to the correct pressure
- Other measures
 - Keeping the load in the boot as low as possible
 - Avoiding using air conditioning

The research on which this report is based is intended to give a baseline against which the impact of future campaigns can be measured. It also aims to identify the most effective channels for reaching and influencing taxi and PHV drivers' and owners' attitudes and behaviours towards smarter driving.

2 Objectives

The two main aims of the study were:

- To assess awareness of smarter driving/eco maintenance techniques among the taxi and private hire trades.
- To help identify the best methods of raising awareness of smarter driving/eco maintenance and communicating with the trade on these issues.

The specific objectives were:

- To establish a baseline measure of awareness of smarter driving (not TfL specific, but rather the idea of smarter driving behaviour/techniques).
- To establish what drivers understand smarter driving to mean.
- To determine to what extent drivers have modified their driving towards smarter driving techniques, e.g. smooth driving, accelerating slowly.
- To determine to what extent drivers have modified their maintenance practices to be more eco-friendly, checking pressure of tyres.
- To understand the triggers and motivations for any changes in behaviour regarding smarter driving/eco maintenance,
- To assess drivers' disposition towards changing their behaviour in relation to smarter driving/eco maintenance.
- To identify the best methods of raising awareness of smarter driving/eco maintenance and communicating with the trade on these issues.

The following objectives were in the brief but have not been addressed in this piece of research due to interview time limitation:

- To identify the source of awareness of smarter driving.
 - Impact of fuel price and expenditure on driving
 - Impact of economic downturn
 - Impact of driving on environment

- To gain profile of the taxi and PHV fleet:
 - Type of vehicle used.
 - Reason for vehicle choice / priorities when choosing a vehicle.

3 Survey methodology

This study is based on CATI (computer aided telephone interviews) methodology and eight qualitative interviews were conducted amongst 2 sample groups. Telephone numbers were obtained from the Public Carriage Office records (either mobile phones or landlines). All taxi and PHV owners, operators or drivers were selected on the basis that they were operating in the London area.

We conducted telephone interviews with:

- 85 private hire vehicle (PHV) owners and operators and 2 taxi owners (note: we report only the combined figures for PHV and Taxi owners and operators due to the low base for taxi owners)
- 294 taxi drivers
- 309 private hire vehicle drivers

We conducted 8 qualitative interviews with:

- People who are currently trading as PHV Operators and owners for a business involving 10 or more vehicles
- People who currently operate a fleet of 10 or more taxis

The telephone Fieldwork was conducted between 17th and 29th June 2009. Interview length was on average 15 minutes. The questionnaire is included in the Appendix. The qualitative interviews took the form of 30-45 minute telephone interviews, and were conducted from 2nd-8th July 2009. The tables overleaf show the profile of PHV and fleet operators participating in the research.

People who are currently trading as PHV Operators and owners for a business involving 10 or more vehicles					
	Date	Time	Age	Gender	Ethnic Group
1	02/07/2009	09:30	35-44	Male	White British
2	03/07/2009	13:00	55-64	Male	Other White
3	07/07/2009	10:00	35-44	Male	White British
4	07/07/2009	11:00	45-54	Male	White British

People who currently operate a fleet of 10 or more taxis					
	Date	Time	Age	Gender	Ethnic Group
1	02/07/2009	13:00	35-44	Male	Other Turkish
2	02/07/2009	16:00	35-44	Male	Asian/Indian
3	06/07/2009	15:00	65+	Male	White British
4	08/07/2009	12:00	45-54	Male	White British

A pre-notification letter was sent to all drivers, owners and operators. The letter included very broad details of the impending research, fieldwork dates and also *opt-out* information. A Synovate contact telephone number was included in the letter to enable drivers to call if they wanted to get more details about the research or they did not wish to participate.

4 Main Findings

4.1 Attitudes towards driving and the environment

To avoid prompting taxi and PHV owners/operators, and drivers on the specific nature of the research, we asked them about their overall attitudes to driving and the environment towards the end of the questionnaire. However, the response provides useful context to understand the overall response to propose eco smarter driving measures.

Overall, PHV drivers tend to be more open to driving in a way that is good for the environment and to minimise fuel consumption. Among taxi drivers, there is more apathy and a reluctance to driving in ways that minimise the impact on the environment and fuel consumption. Taxi and PHV owners/operators' views on the environment and to minimise fuel consumption are generally more in line with those of PHV drivers.

In terms of general attitudes to environmental issues:

- Most taxi and PHV owners/operators (86%) and PHV drivers 85% believe that climate change is a problem that should be taken seriously. Taxi drivers (77%) are less likely to say they believe that climate change is a problem that should be taken seriously than the PHV drivers and taxi and PHV owners/operators. However, a sizeable proportion agree with this statement. The levels of disagreement are lowest among PHV owners/operators (3%), whilst (15% of taxi drivers and 10% of PHV drivers) say this.
- Six in ten taxi and PHV drivers agree that climate change is talked about too much on the news (61% of taxi drivers and 63% of PHV drivers). A substantial minority disagrees (30% of taxi drivers and 27% of PHV drivers). Opinion is more divided among taxi and PHV owners and operators (47% agree, while 39% disagree).
- Similarly, six in ten taxi and PHV drivers also think environmental threats such as global warming have been exaggerated (58% of taxi drivers, 58% of PHV drivers). A substantial minority disagrees (27% of taxi drivers and 32% of PHV drivers). Again, opinion is slightly more divided among PHV owners and operators (47% agree, while 36% disagree).

However, taxi and PHV owners/operators and drivers do not reject other measures just because they believe that climate change is talked about too much in the news and that the threat of global warming has been exaggerated

- Around nine in ten taxi and PHV owners/operators (86%) and PHV drivers (90%) say they try to drive in a way that is good for the environment. Among taxi drivers, the proportion saying they try to drive in a way that is good for the environment is significantly lower than among PHV drivers. Taxi drivers are twice as likely as PHV drivers to say they disagree (12% of taxi drivers compared to 6% of PHV drivers).
- Eight in ten (82%) taxi and PHV owners/operators and PHV drivers (78%) agree that the way they drive has an impact on the environment. Among taxi drivers (68%), significantly fewer agree that the way they drive has an impact on the environment. Taxi drivers are more likely than PHV drivers and taxi and PHV owners/operators to disagree with this (25%, 15% and 11% respectively).
- Most (70%) taxi and PHV owners, taxi drivers (56%), and PHV drivers (72%) agree there is a strong link between CO₂ emissions from cars and climate change. In contrast, 17% of taxi and PHV owners/operators, 25% of taxi drivers and 21% of PHV drivers disagree.
- Around two thirds (63%) of taxi and PHV owners/operators, PHV drivers (70%), and a substantial minority of taxi drivers (48%) agree that there is a direct link between climate change and petrol consumption. In contrast, 17% of taxi and PHV owners/operators, 29% of taxi drivers, and 19% of PHV drivers disagree.
- Six in ten taxi and PHV owners/operators (61%) and PHV drivers (61%), believe that they can make a difference to the environment. There is greater apathy among taxi drivers with just 46% believing they cannot make a difference. On this issue, there is a substantial minority of all audiences who believe they are unable to make a difference to the environment, (34% of taxi and PHV owners/operators, and 34% of PHV drivers and 47% of taxi drivers).

The following series of charts give a more visual illustration of attitudes towards driving and the environment.

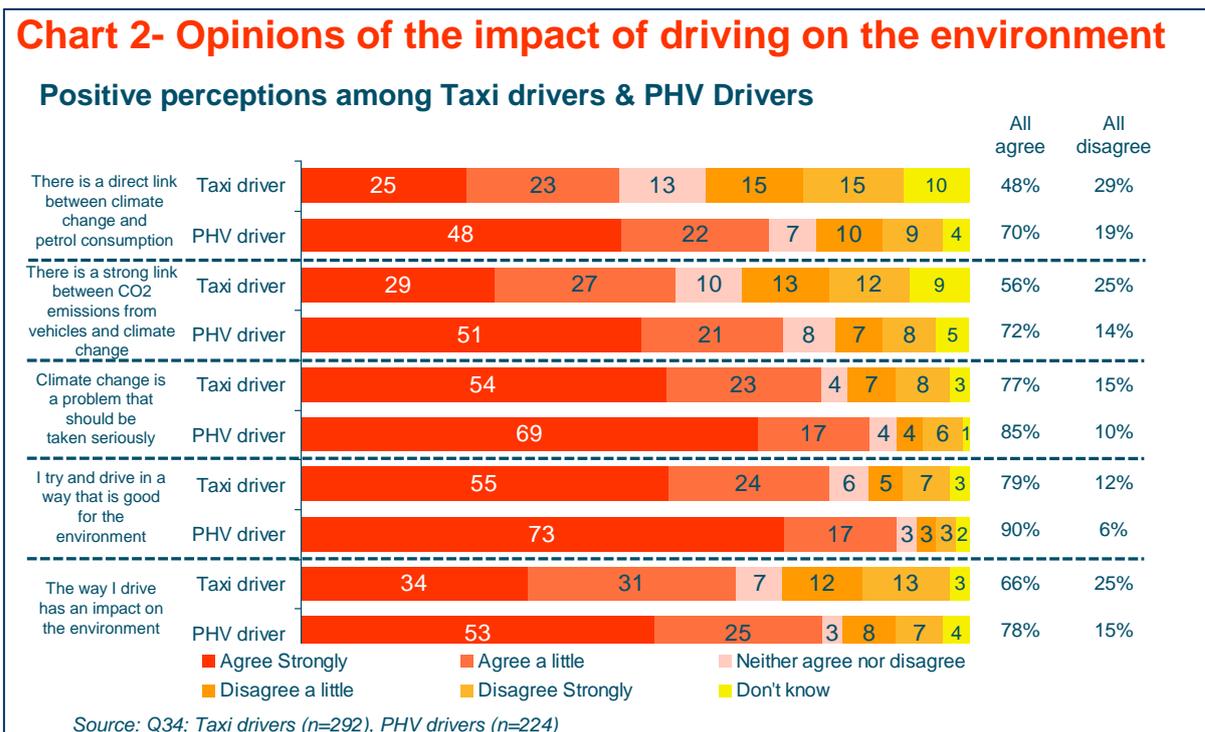
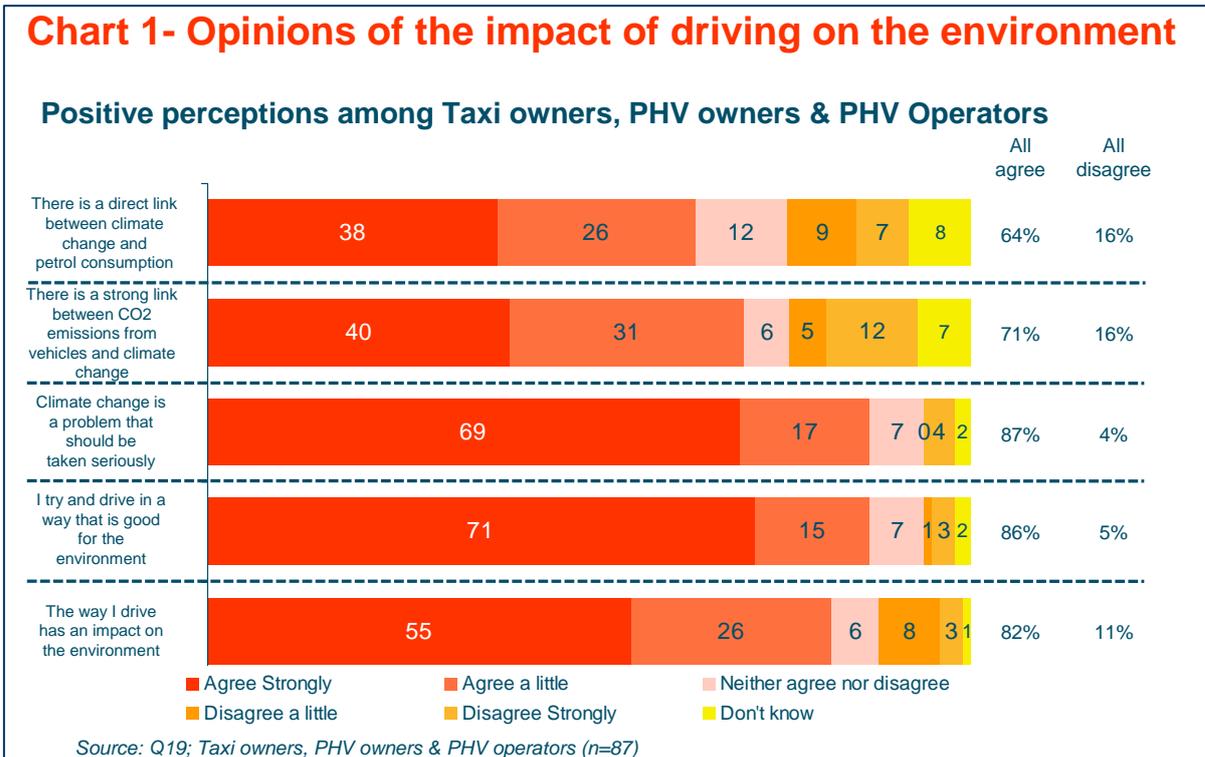


Chart 3 - Opinions of the impact of driving on the environment

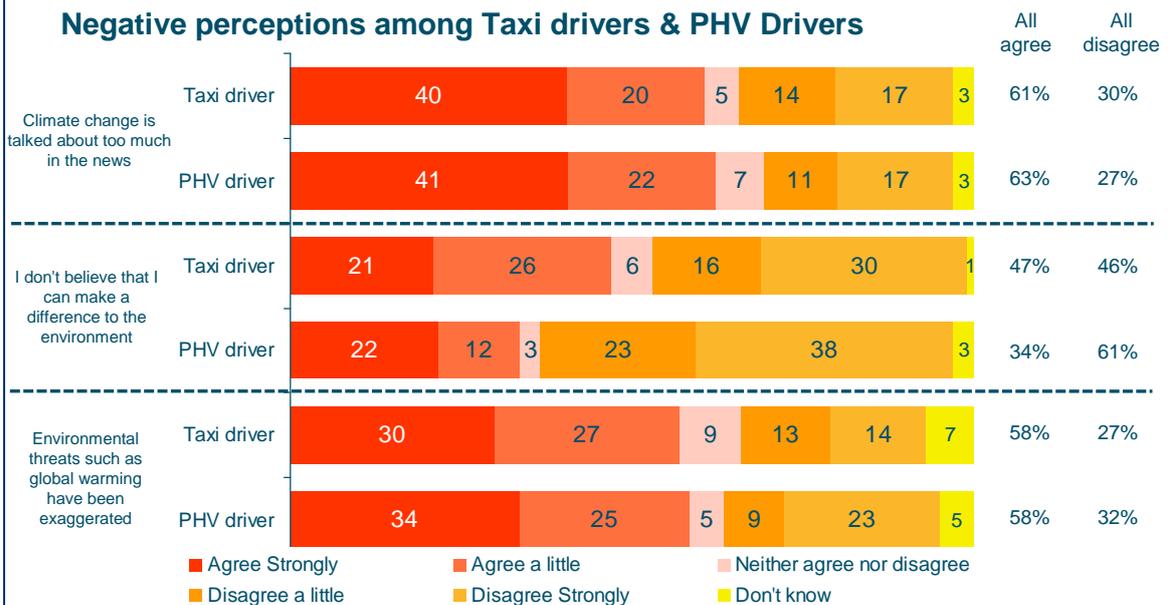
Negative perceptions among Taxi Owners, PHV Owners & PHV Operator



Source: Q19; Taxi owners, PHV owners & PHV operators (n=87)

Chart 4 - Opinions of drivers on the impact on the environment of driving

Negative perceptions among Taxi drivers & PHV Drivers



Source: Q34; Taxi drivers (n=292), PHV drivers (n=224)

To summarise, the survey shows PHV drivers and taxi and PHV owners/operators as being more positive towards initiatives that minimise any impact on the environment, compared to taxi drivers, and generally more open to driving in a way that is good for the environment.

The survey does not provide any strong insight into the reasons why the PHV community are generally more positive than taxi drivers. It is worth noting that Taxi drivers are predominantly white and tend to be older, with 43% aged 55+. There is anecdotal evidence which suggests that there is a greater reluctance to accept climate change among older people. The PHV driver sample is younger and has a high number of people from BAME groups.

In the qualitative research, the majority of PHV operators and taxi fleet owners highlight how the environment plays an important role in their lives and it is a serious issue that is having an effect on the entire population.

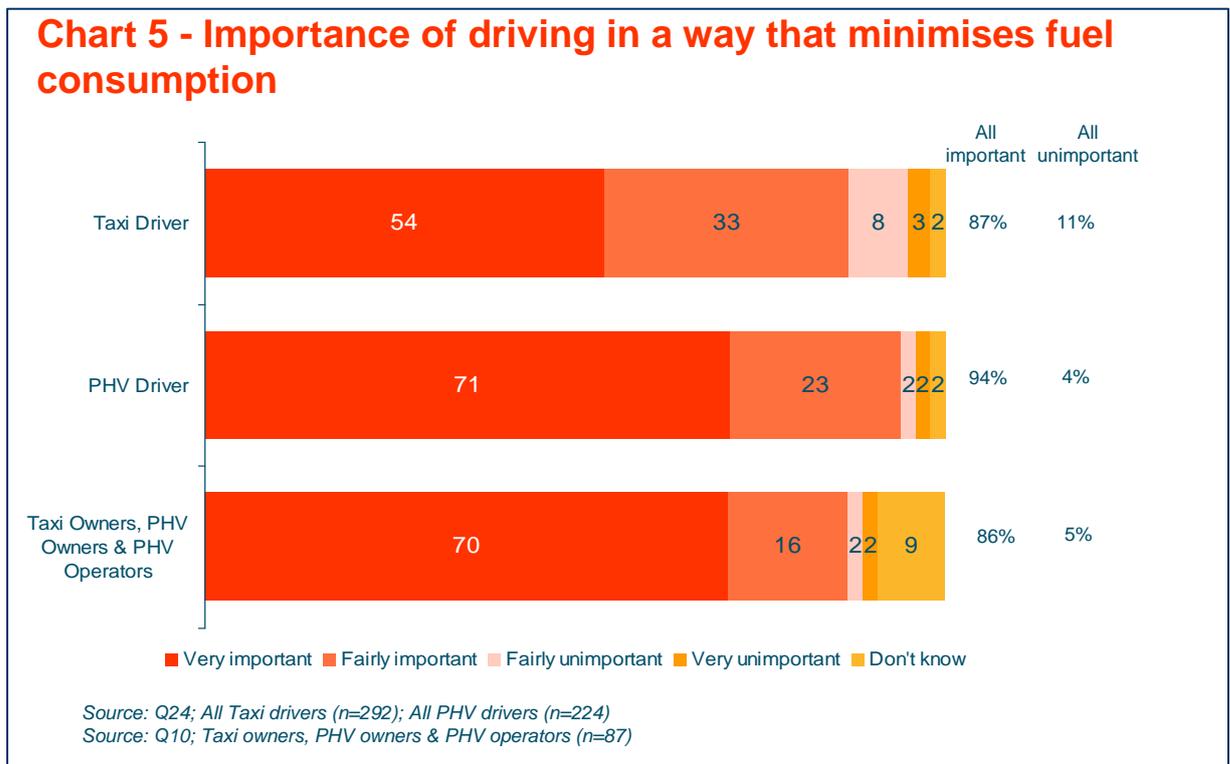
“Having been in the trade for around forty years, I’d be lying to you if I said I hadn’t seen a difference. Anybody of my age can tell you about climate change, anybody who remembers the winters we used to get in the 40’s and 50’s, the floods, you don’t get those anymore, you still get floods but not as bad” (PHV operator and owner, male)

However, there is mixed reaction towards the causes of environmental issues, in particular global warming. Some believe that the way people live their lives is the main cause, while other owners assume that global warming is a natural phenomena.

There is acknowledgement of how the Taxi/PHV industry inevitably causes an impact on the environment. However, there is a clear view that their industry is not seen as a major polluter in comparison to over events happening across the world. From a personal perspective, the majority agree that they can make a difference to the environment.

4.2 Minimising fuel consumption

As shown in chart 5, the majority of taxi and PHV owners/operators, taxi and PHV drivers think it is important to drive in a way that minimises fuel consumption.



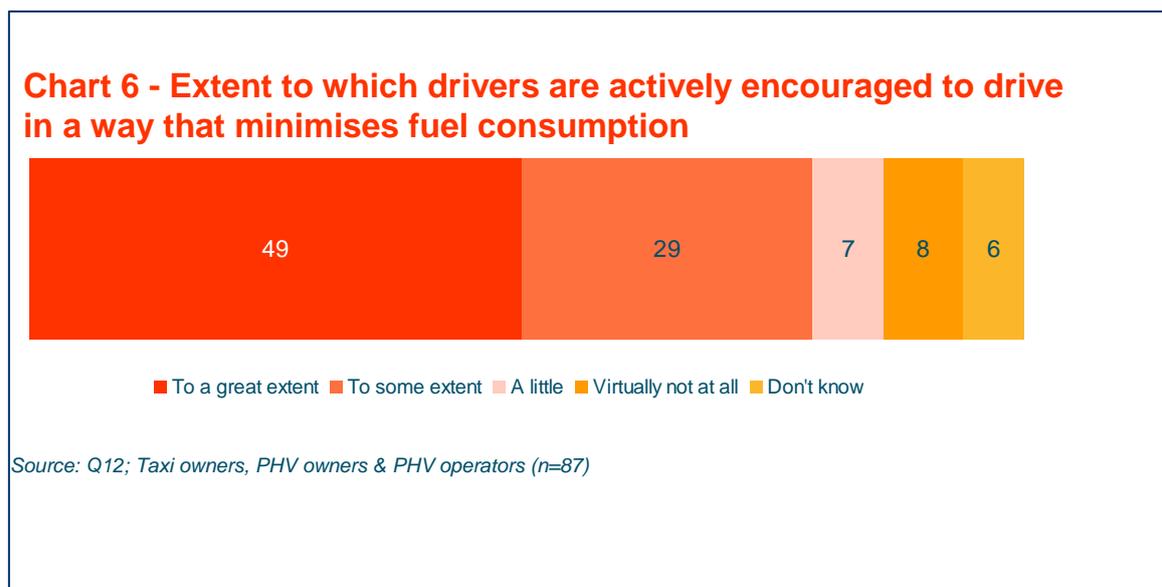
- The majority of PHV drivers (94%) think it is important to drive in a way that that minimise fuel consumption, in fact they are more likely to say very important. Although significantly fewer taxi drivers than PHV drivers think it is important to drive in a way that minimises fuel, the general view is that this is important, with 86% saying this.
- Among taxi and PHV owners/operators, overall, 86% think it is important that their drivers drive in a way that minimises fuel consumption, with 70% considering it very important.

However, considering such behaviour important does not mean that taxi and PHV owners/operators do anything about it. Among taxi and PHV owners/operators who think it is

important, when asked, the extent to which they actively encourage their drivers to drive in a way that minimises fuel consumption:

- (49%) say they encourage them to a great extent
- (29%) say they encourage them to some extent
- (7%) say they encourage them a little
- (8%) say virtually not at all and 6% say they don't know

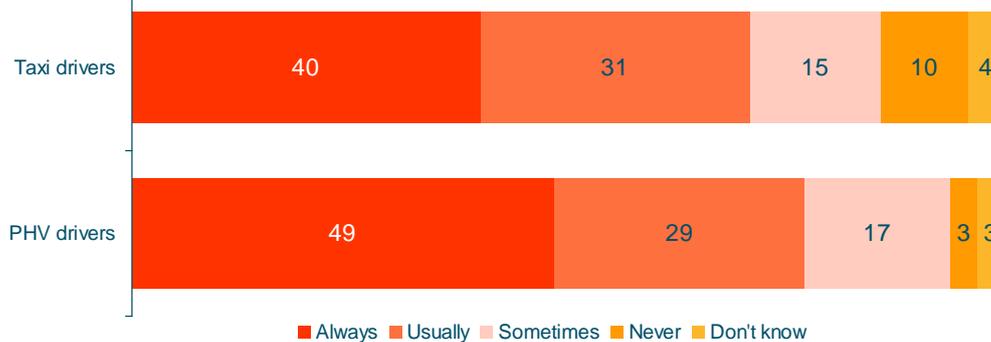
Chart 6 shows the above findings in a diagrammatic form.



Similarly, among taxi and PHV drivers who think it is important, when asked if they drive in a way that seeks to minimise fuel consumption:

- 40% of taxi drivers and 49% of PHV drivers say they always do
- 31% taxi drivers and 29% of PHV drivers say they usually do
- 15% taxi drivers and 17% PHV drivers say they sometimes do
- 10% taxi drivers and 3% PHV drivers say they never do
- and 4% taxi drivers and 3% PHV drivers say they don't know if they do or not

Chart 7- Driving in a way that seeks to minimise fuel consumption



Source: Q26; All Taxi drivers (n=292); All PHV drivers (n=224)

All groups are more likely to cite economic reasons than environmental as the reasons why they think it is important to drive in a way that minimises fuel consumption. In summary:

- Six in ten taxi and PHV owners/operators (61%) and PHV drivers (58%) cite economic reasons (i.e. to save money). Among taxi drivers, this reason is more salient, with three in four (75%) citing an economic reason

In the qualitative research a minority felt that it is particularly hard to influence driver behaviour, primarily as any required behaviours are seen as unenforceable and thus cannot be effectively monitored. However, there is a belief that costs can influence behaviour.

“We do try and, it’s difficult to influence them. They will drive, some of them are incredibly conscious of fuel and try and drive as efficiently as possible and we’ve had drivers who will inflate their tyres in order to try and maximise the amount of miles per gallon that they get. The single cost that the driver has is his fuel so the way he drives will reflect that cost, most of them are aware of that and we try and make them aware of that as well, but we don’t go overboard

on trying to say you must drive like this. It’s not something that is important and you can’t really police it and someone’s driving style is very personal to them” (Taxi operator, male)

- Taxi and PHV owners/operators (33%) are likely to encourage drivers to drive in a way that minimises fuel consumption for environmental reasons (i.e. to protect the environment). Among drivers, 24% of PHV and 18% of PHV drivers cite environmental reasons.

Businesses are turning green issues to their advantage, becoming increasingly savvy about the perceived benefits of being portrayed as a green company and are creating a wider client base as a result of being green.

“It’s what clients want, so it’s what we give to them. You cannot underestimate the public perception of being green, if you’re seen to be green; you’re seen to be doing something good for the environment. Clients absolutely love it and we promote that we’re a green company everywhere, all over our website and leaflets and as a result our client base has almost doubled over the last year” (PHV operator and owner, male)

Other reasons mentioned as to why it is important to drive in a way that minimises fuel consumption include:

- specifically saving on fuel (19% of taxi and PHV owners/operators, 14% of taxi drivers and 8% of PHV drivers)
- customer experience reasons, i.e. to give passengers a smoother ride (12% of taxi and PHV owners/operators , 12% of taxi drivers, and 25% of PHV drivers)

The number of taxi and PHV owners/operators or drivers who say they do not consider driving in a way that minimises fuel consumption important is relatively low. Consequently, we have reported their reasons thematically rather than presenting percentages here. In summary, the main reasons they do not consider this important include:

- Low levels of concern about the issue generally
- Considering this something that is too difficult to do
- Or thinking that specific actions are necessary for a good customer experience (e.g. using air conditioning)

Taxi and PHV drivers were asked for the main problem they experience when trying to minimise fuel consumption. The main problems cited spontaneously are:

- Traffic jams and congestion (34% of taxi drivers, and 37% of PHV drivers)
- Frequent stopping and starting in town traffic (9% of taxi drivers, and 4% of PHV drivers)
- Taxation on fuel (6% of taxi drivers, and 5% of PHV drivers)
- Other drivers forcing them to break hard, stop and start frequently, etc (5% of taxi drivers, and 5% of PHV drivers)
- Road works (6% of taxi drivers, 4% of PHV drivers)
- Speed humps (6% of taxi drivers, 2% of PHV drivers)
- Traffic lights (4% of taxi drivers, 4% of PHV drivers)
- Customer demands, e.g. taking specific routes (2% of taxi drivers, 4% of PHV drivers)

Pleasingly, a third of taxi drivers (34%) and slightly fewer PHV drivers (28%) say they experience no problems driving in a way that minimises fuel consumption.

The qualitative research found that fuel prices, alongside with congestion are the biggest motoring concerns for PHV operators and fleet owners. The rationale behind their concerns is financially driven. There is a feeling that the price of fuel is too expensive for members of the public to easily afford and that congestion (especially in London), is causing drivers to waste fuel and thus waste money.

“Well if I told you that 15 years ago fuel prices were 300% less than it is now. How much has my earnings increased in the last 15 years, I wouldn’t say it’s more than 10%, so there you go! Driving and working in London is increasingly becoming more of a nightmare because it’s so expensive” (Taxi operator, male)

Passenger affordability could inevitably be a negative impact on the industry; therefore, driving in ways that minimise fuel consumption would lead to costs which could be passed on to passengers.

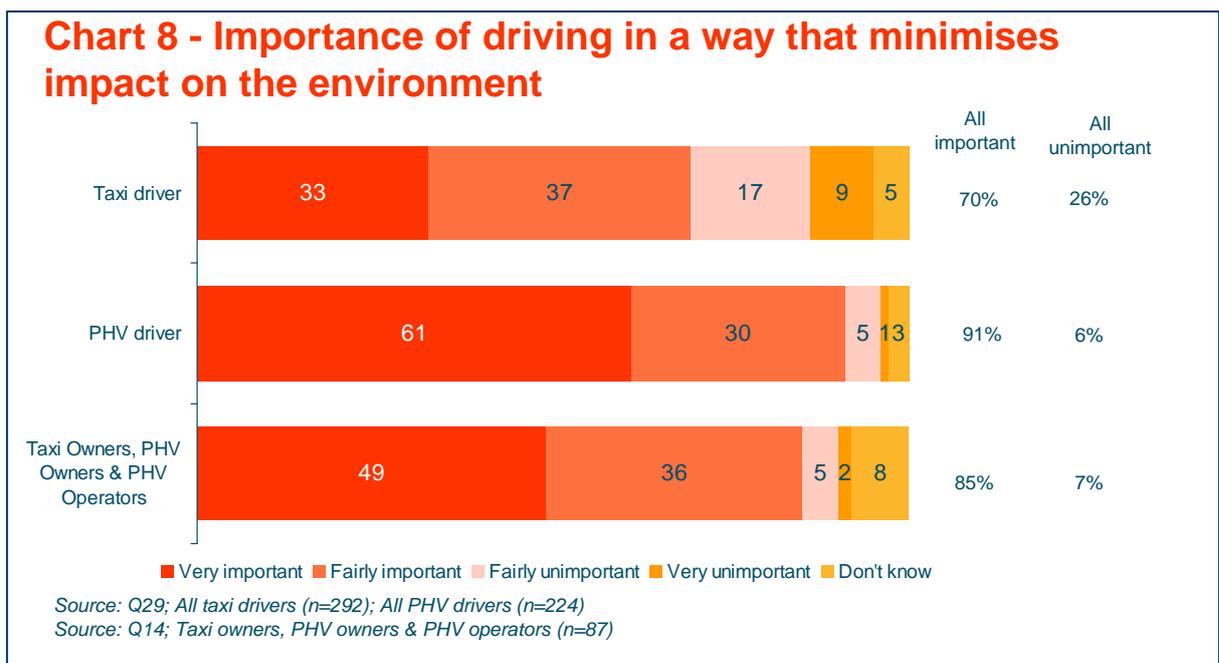
4.3 Minimising impact on the environment

As shown in the chart below, a high proportion of taxi and PHV owners/operators, and particularly PHV drivers also consider it important to drive in a way that minimises impact on the environment. Although this is also important for taxi drivers, significantly fewer rate it as either very or fairly important. However, all groups are likely to consider driving in a way that minimises economic impact very important than environment impact.

When asked directly, how important it is for them that their drivers drive in a way that minimises the impact on the environment:

- 85% of taxi and PHV owners/operators consider it important (49% say very important), while 7% consider it unimportant.

While 91% of PHV drivers compared to 70% of taxi drivers think it is important to drive in a way that minimises the impact on the environment. PHV drivers are particularly likely to consider it very important (61%), but only a third of taxi drivers share their views (33%).



Taxi and PHV owners/operators, and drivers who think it is important to drive in way that minimises environmental impact are much more likely to cite environmental issues than economic ones as the reasons why.

Among taxi and PHV owners/operators who think it is important for their drivers to drive in a way that minimises the impact on the environment, when asked why they held such views:

- 51% think it is important to reduce CO₂ emissions, and to tackle climate change or global warming
- 24% think it is important that taxi drivers do their bit to reduce pollution
- 11% want to protect the planet for their children / future generations
- 8% think its just the right thing to do
- While a further 8% think it saves money

Among drivers who think it is important, when asked why:

- 50% of taxi drivers and 58% of PHV drivers cite environmental reasons (e.g. reducing CO₂ emissions, tackling global warming, etc.)
- 16% of taxi drivers compared to 7% of PHV drivers want to save the planet for future generations. This belief was particularly important to older drivers who are at an age where they can have children and some grandchildren.
- 5% of taxi drivers and 6% of PHV drivers cite economic reasons (i.e. saving fuel saves money)

Among drivers who consider it unimportant:

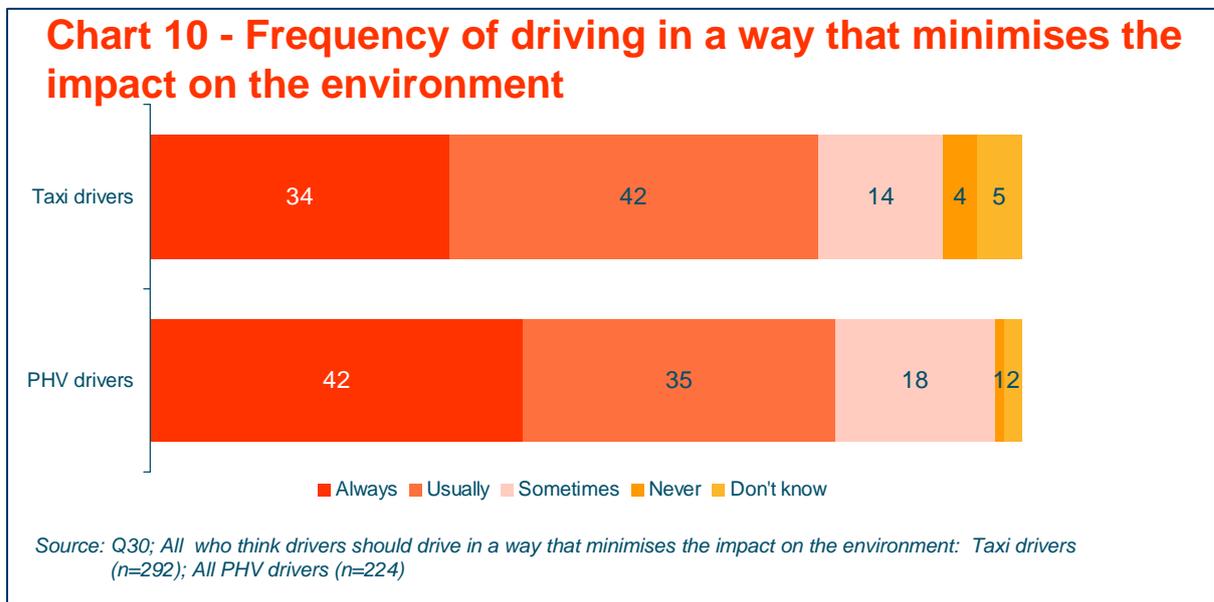
- 36% of taxi drivers and 50% of PHV drivers say that this is not something that concerns them (small base for PHV drivers = 14)
- 23% of taxi drivers and 14% of PHV drivers say they are sceptical about the threat of global warming

The bases for taxi and PHV owners/operators are too low to allow for any analysis.

As shown with importance of minimising fuel consumption, perceived importance does not always mean a behaviour change. Among taxi and PHV drivers who think it is important to drive in a way that minimises the impact on the environment, when asked if they drive in a way that seeks to minimise this impact:

- 34% of taxi drivers and 42% of PHV drivers say they always do
- 42% of taxi and 35% of PHV drivers say they usually do
- 14% of taxi drivers and 18% of PHV drivers say they sometimes do
- 4% of taxi drivers and 1% of PHV drivers say they never do
- 5% of drivers and 2% of PHV drivers say they don't know if they do or not

Although there are no statistically significant differences between taxi and PHV drivers, proportionately more PHV drivers say they always drive in a way that minimises the impact on the environment.

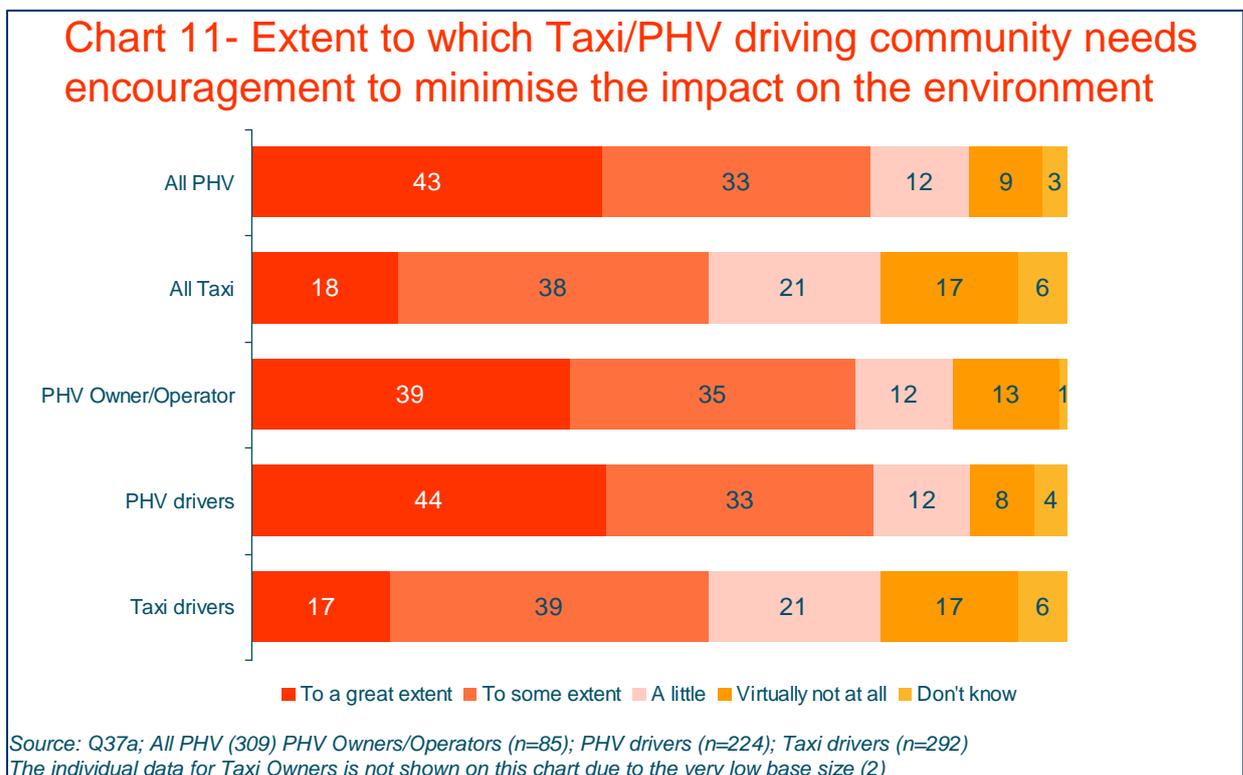


Most agree that the taxi and PHV driving community needs encouraging to drive in way that minimises their environmental impact and would be receptive to such measures. When asked the extent to which the taxi and PHV driving community needs encouraging to drive in ways that minimise the impact on the environment:

- Overall, 43% of the PHV and 18% of the taxi communities say they need encouraging to a great extent
- 33% of PHV and 38% of the taxi communities need encouraging to some extent
- 12% of PHV and 21% of the taxi communities, need a little encouraging
- 9% of the PHV and 17% of the taxi communities need virtually no encouraging at all
- 3% of PHV and 6% of Taxi say they don't know how much encouragement they would need.

The PHV community are significantly more likely to think that their community needs a great extent of encouragement to drive in a way that minimises environmental impact than the taxi community. In fact, the taxi community are more likely to think that their community needs a little encouragement.

The chart below shows the extent to which the individual groups say their community needs encouragement to drive in a way that minimises the impact on the environment.



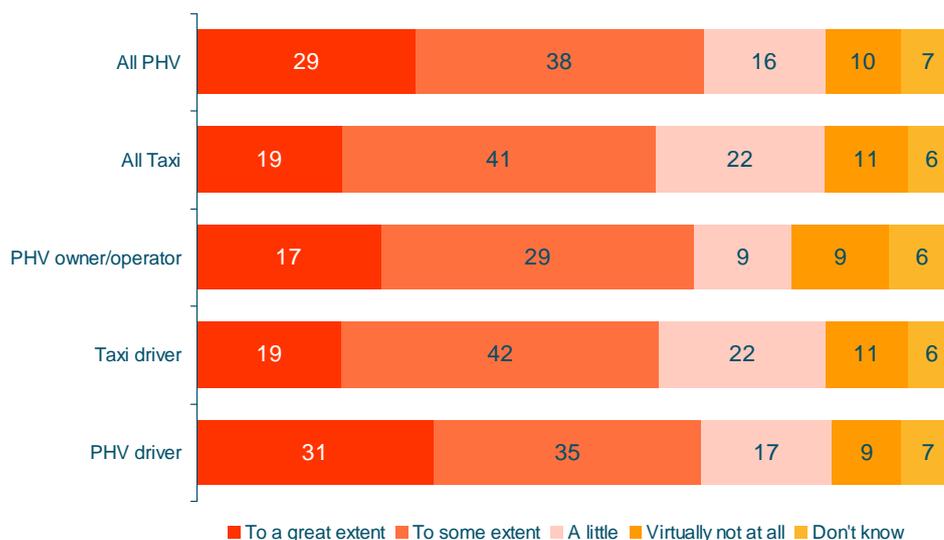
When asked the extent to which the taxi and PHV driving community would be receptive to messages encouraging them to drive in ways that minimise the impact on the environment:

- 29% of the PHV and 19% of the taxi communities would be receptive to a great extent
- 38% of the PHV and 41% of the taxi communities would be receptive to some extent
- 16% of the PHV and 22% of the taxi communities would be a little receptive
- 10% of the PHV and 11% of the taxi communities would be virtually unreceptive
- 7% of PHV and 6% of the Taxi communities don't know how receptive they would be.

Again we see the PHV community being more open than the taxi community with significantly more saying their community would be more receptive to encouragement to drive in a way that minimises the impact on the environment.

The chart below illustrates the extent to which the individual groups would be receptive to their communities being encouragement to drive in a way that minimises the impact on the environment.

Chart 12 - Extent to which Taxi/PHV driving community would be receptive to encouragement about driving in a way which minimises the impact on the environment



Source: Q37b; All PHV (309) PHV Owners/Operators (n=85); PHV drivers (n=224); Taxi drivers (n=292)
The individual data for Taxi Owners is not shown on this chart due to the very low base size (2)

The qualitative research shows that a minority of PHV operators and taxi fleet owners have started to introduce more environmentally friendly vehicles into their fleet in order to reduce CO₂ emissions and maximise the fuel efficiency of the vehicles. However there are some barriers operators and fleet owners face.

“Our new Mercedes will be the new greener models because they use fuel more efficiently, they are not hybrids, we have seen enough of those to know they don’t really work well enough for the work we do” (PHV operator and owner, male)

In addition, initiatives to reduce CO₂ emissions from current vehicles have also been used, although there is a view that some form of financial assistance should have been provided.

“All the taxi trade with vehicles older than 2001 was told that we had to have a new catalytic converter put into our vehicles, which we had to pay between £2k and £3k for, we had to pay that as well and we got no help from the local authorities, it is a financial burden” (Taxi owner, male)

PHV operators and taxi fleet owners acknowledge that their motivations behind being portrayed as green may not be genuine. However, they see that it is important for their business to be perceived as being green and environmentally friendly in order to maintain and attract clients.

“A lot of our clients have been asking us about it, so we are reacting to our clients” (PHV operator and owner, male)

4.4 Spontaneous and prompted recall of eco smarter driving measures

In the absence of any campaign, spontaneous recall of any eco smarter driving measures is relatively low among taxi and PHV owners/operators. We would expect spontaneous recall to rise if such messages were promoted via promotional activities.

Among the taxi and PHV owners/operators who actively encourage their drivers to minimise fuel consumption (i.e. to a great extent or to some extent), in general terms:

- 31% say they have spoken to their drivers generally about measure to reduce fuel consumption, and 22% say they have spoken to them about actions to minimise environmental impact
- 11% say they have given them training to reduce fuel consumption, and 8% say they have given them training about measures to reduce environmental impact

Table 1 and 2 show the steps taxi and PHV owners/operators spontaneously say they are taking to encourage drivers to drive in a way that minimises fuel consumption and the impact on the environment

Table 1- Steps taken to encourage drivers to minimise fuel consumption

Steps taken	%
Discuss with them and give them advice	31
Encourage better driving	25
Vehicle maintenance/checks	13
Training/education	11
Encourage them to take the shortest routes	10
Ensure they have the most fuel efficient vehicles	8
Conduct tests/vehicle checks	7
Encourage them to switch off the engine when idle	7
Other	8
None	15

Source: Q13; All taxi and PHV owner/operator who actively encourage their drivers to minimise fuel consumption (n=61)

Table 2- Steps taken to encourage drivers to minimise the impact on the environment

Steps taken	%
Discuss with them and give them advice	22
Encourage better driving	17
Vehicle maintenance/checks	15
Encourage them to switch off the engine when idle	12
Training/education	8
Encourage them to take the shortest routes	8
Financial incentives/deterrents	7
Encourage them to take customer comfort/safety into consideration	7
Ensure they have the most fuel efficient vehicles	7
Conduct tests/vehicle checks	7
Encourage them to follow rules/regulations	5
Other	8
None	12

Source: Q17; All taxi and PHV owner/operator who actively encourage their drivers to drive in way that minimises impact on the environment (n=60)

Table 3 and 4 show the steps taxi and PHV drivers spontaneously say they are taking to drive in a way that minimises fuel consumption and the impact on the environment.

Table 3- Steps that are taken to minimise fuel consumption

Steps taken	Taxi drivers	PHV drivers
	%	%
Driving slower	47	40
Not accelerating as much	42	26
Driving carefully/sensibly	21	27
Not breaking sharply	20	11
Check tyre pressure	9	13
(Regular) vehicle maintenance	9	8
Turn engine off when idle	9	7
More careful gear changing	3	10
Turn air-conditioning down/off	2	7
The routes I take	2	6
The times of day I drive	1	3
Other	2	5
Don't know	1	3
None/no steps	3	2

Source: Q27; All Taxi Drivers and PHV Drivers who drive in a way which minimises fuel consumption, Taxi drivers (n=253), PHV drivers (n=212)

Table 4- Steps that are taken to minimise the impact on the environment

Steps taken	Taxi drivers	PHV drivers
	%	%
Driving slower	39	37
Not accelerating as much	39	20
Driving carefully/sensibly	23	18
Not breaking sharply	16	4
(Regular) vehicle maintenance	10	15
Turn engine off when idle	10	10
Check tyre pressure	9	5
Don't make unnecessary journeys	1	9
More careful gear changing	1	6
Buy better, cleaner fuel	3	3
Other	14	17
Don't know	3	11
None/no steps	3	2

Source: Q31; All who drive in way that minimises impact on the environment, Taxi drivers (n=223), PHV drivers (n=204)

In the section below we explore spontaneous and prompted responses to eco smarter driving options.

4.4.1 Driving techniques to minimise fuel consumption / environmental impact

A. Avoiding sharp acceleration and breaking hard

Among taxi and PHV owners/operators who actively encourage their drivers to drive in a way that minimises fuel consumption / environmental impact:

- One in four (25%) say spontaneously that they encourage their drivers to accelerate less or to drive sensibly to minimise fuel consumption.
- 17% say spontaneously that they encourage their drivers to drive slower, sensibly, and not to accelerate hard to minimise environmental impact

Taxi and PHV drivers who say they drive in a way that seeks to minimise fuel consumption are even more likely to mention driving sensibly, slower and not accelerating hard. In summary:

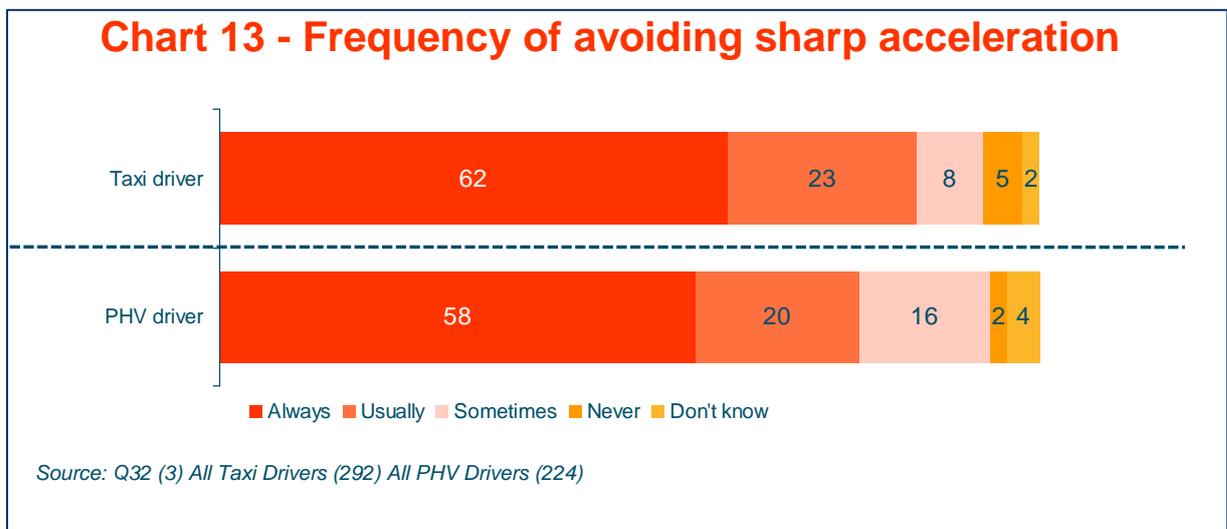
- 47% of taxi drivers and 40% of PHV drivers spontaneously say they drive slower / within the speed limit. With proportionately more drivers spontaneously saying this.
- 42% of taxi drivers and 26% of PHV drivers say they do not accelerate hard / rev the engine less. Taxi drivers are significantly more likely to take this step as a measure of minimising fuel consumption
- Taxi drivers (20%) are more likely to try to avoid breaking sharply compared to PHV drivers (11%)
- 21% of taxi drivers and 27% of PHV drivers say they drive sensibly / less erratically. On this issue there are no differences in behaviour between taxi and PHV drivers.

A similar response was obtained when asked what steps they take to drive in a way that minimises environmental impact. Among those who say they drive in a way that seeks to minimise environmental impact:

- 39% of taxi drivers and 37% of PHV drivers say spontaneously that they drive slower / within the speed limit to minimise environmental impact
- 39% of taxi drivers and 20% of PHV drivers say spontaneously that they try to avoid accelerating hard to minimise environmental impact. Taxi drivers are particularly likely to say they drive in this way to minimise the impact on the environment
- 23% of taxi drivers and 18% of PHV drivers say spontaneously that they drive sensibly / less erratically to minimise environmental impact. Although not statistically different, proportionately more taxi drivers drive in this manner than PHV drivers
- Significantly more taxi (16%) than PHV drivers say spontaneously that they try to avoid breaking sharply to minimise environmental impact.

When prompted, almost all (91%) taxi and PHV owners/operators, taxi drivers (97%), and PHV drivers (96%) say they are aware that avoiding sharp acceleration and heavy breaking **reduces fuel consumption** when prompted. Similarly, almost all taxi and PHV owners/operators (98%), taxi driver (92%) and PHV drivers (92%) say they are aware that avoiding sharp acceleration and heavy breaking **reduces CO2 emissions** when prompted. When asked if they seek to avoid sharp acceleration:

- As shown in chart 13 , 62% of taxi drivers and 58% of PHV drivers say they always do
- 23% of taxi drivers and 20% of PHV drivers say they usually do
- 8% of taxi drivers and 16% of PHV drivers say they sometimes do
- 5% of taxi drivers and 2% of PHV drivers say they never do
- 2% of taxi drivers and 4% of PHV drivers say they don't know if they do or not



Overall, it would appear that the taxi and PHV driving community is receptive to messages about avoiding accelerating and breaking hard both to reduce fuel consumption and minimising environmental impact. Most say they usually or always following such advice. Frequent prompts may encourage higher levels of compliance.

It is worth noting that taxi drivers were more likely to say spontaneously they avoid breaking sharply to minimise both fuel consumption and environmental impact than PHV drivers.

Although a high proportion of PHV drivers say they always or usually avoid sharp acceleration when prompted, few spontaneously say they routinely do this to minimise on fuel consumption or the impact on the environment. This message may need to be brought to their consciousness as it is a key smarter driving technique.

All PHV operators and taxi fleet owners are aware that by avoiding sharp acceleration and heavy braking, they would be reducing fuel consumption and CO₂ emissions. The main motivation behind this is to ensure customers receive a smooth and pleasant journey in order to retain business as opposed to being primarily motivated by environmental concerns.

“I’m more worried about how their driving style would benefit the passenger, I would expect them to brake smoothly and accelerate smoothly, we don’t want them to be jerking the passengers around so they are encouraged to drive as smoothly as possible for the benefit of the passenger” (PHV operator and owner, male)

“Sharp acceleration involves extra fuel consumption, it’s not a good idea. Also it’s in their benefit to have a smooth easy ride, so they don’t want to go over speed bumps at 30mph, they won’t want to come back [to that driver] again” (PHV operator and owner, male)

Motivations for avoiding sharp acceleration and heavy braking are mainly around customer experience, costs and minimising damage to vehicles.

B. Avoiding using air conditioning

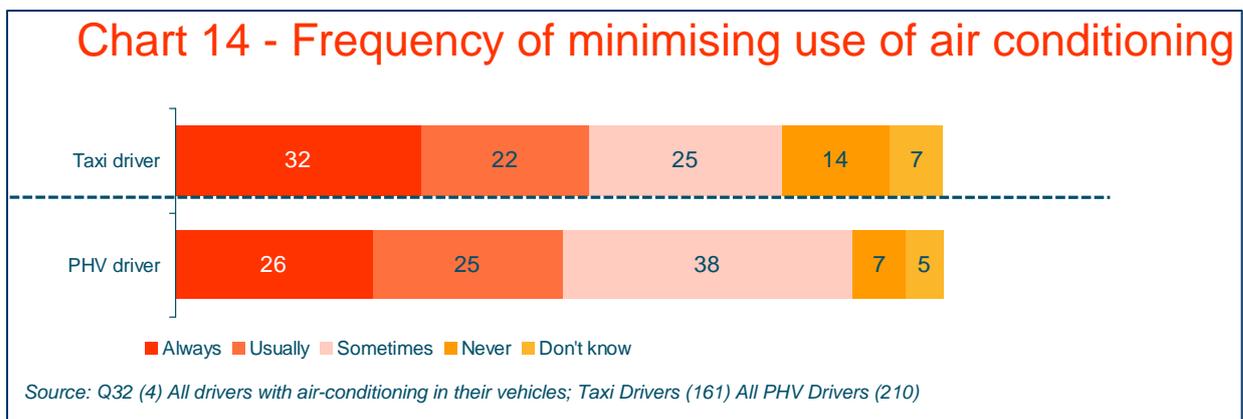
Two-thirds (63%) of taxi and PHV owners/operators say their vehicles have air conditioning. Almost all PHV drivers (94%) say their vehicle has air conditioning compared to around half (55%) of Taxi drivers. Very few taxi and PHV owners/operators or drivers mention using air conditioning sparingly to reduce fuel consumption and / or minimise environmental impact.

However, equally few spontaneously say they need air conditioning for their passenger comfort or that passengers demand air conditioning during hot weather.

Almost all (98%) of taxi and PHV owners/operators, 99% of taxi drivers, and 97% of PHV drivers say they are aware that use of air conditioning uses more fuel when prompted. When asked if they seek to minimise use of air conditioning, among those with air conditioning:

- 32% of taxi drivers and 26% of PHV drivers say they always do
- 22% of taxi drivers and 25% of PHV drivers say they usually do
- 25% of taxi drivers and 38% of PHV drivers say they sometimes do. Although significantly more PHV drivers sometimes do, as we do not know the frequency with which they do this and the time period being taken into account we cannot make any reliable inferences.
- Only 14% of taxi drivers and 7% of PHV drivers say they never do and 7% of taxi drivers and 5% of PHV drivers say they don't know if they do or not. Proportionately more taxi drivers never minimise the use of their air condition although almost all are aware of that it uses more fuel.

Chart 14 - Frequency of minimising use of air conditioning



Overall, it appears that the taxi and PHV communities are aware that they should avoid using the air conditioning. However, many are not routinely following this advice. Consequently, encouraging drivers to use their air conditioning less may present a slightly harder challenge than other eco smarter driving measures.

The qualitative research supports these findings. There is a perception that air conditioning use is primarily driven by customer need and this outweighs the environmental or financial needs of their business and thus this idea is seen as ineffective.

“I’m sure some are aware that air conditioning increases your fuel cost, most drivers to be honest have it switched off during the year, but like now when its 32 centigrade outside, the air conditioning just has to be on for passenger comfort and that’s the priority, not the environment but passenger comfort” (Taxi operator, male)

C. Switching the engine off when idle

Among taxi and PHV owners/operators who say they encourage their drivers to drive in a way that minimise fuel consumption/environmental impact:

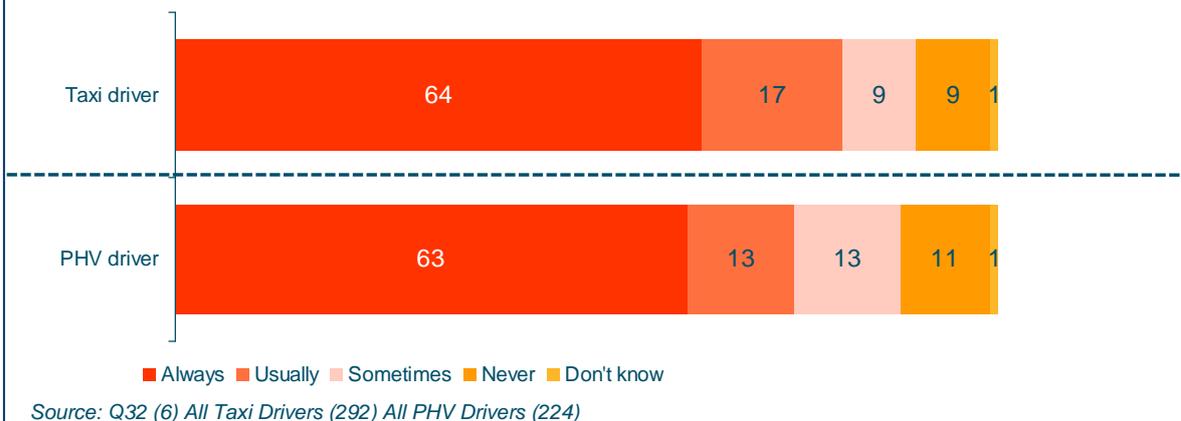
- Only 7% say spontaneously that they encourage their drivers not to leave the engine running while idle to save fuel
- 15% spontaneously say they encourage them to do this to minimise environmental impact

Similarly, 9% of taxi drivers and 7% of PHV drivers spontaneously say they turn the engine off when idle to save fuel, while 10% of taxi drivers and 10% of PHV drivers say spontaneously that they turn their engine off when idle to minimise environmental impact.

Almost all (98%) taxi and PHV owners/operators, taxi drivers (99%), and PHV drivers (98%) say they are aware that leaving the engine running unnecessarily can waste a lot of fuel when prompted. When asked if they avoid leaving the engine running unnecessarily:

- 64% of taxi drivers and 63% of PHV drivers say they always do
- 17% of taxi drivers and 13% of PHV drivers say they usually do
- 9% of taxi drivers and 13% of PHV drivers say they sometimes do
- Only 9% of taxi drivers and 11% of PHV drivers say they never do
- and 1% of taxi drivers and 1% of PHV drivers say they don't know if they do or not.

Chart 15 - Frequency of Avoiding leaving the engine running unnecessarily



The qualitative research shows that PHV operators and taxi fleet owners feel that it will be very hard to encourage drivers to actively avoid leaving the engine running.

“I think given you’re working in central London where you’re stop starting all the time I think its unworkable on a day to day basis, even my car which has stop start on it, it’s a BMW, that itself doesn’t work all the time” (Taxi operators, male)

A key reason cited is the fact that by having the engine switched off, drivers are potentially losing out on business and therefore would keep their engines on to prevent this. In addition,

the majority think that although drivers may be saving money in the short term by avoiding leaving their engine on unnecessarily, in the long term, this may end up damaging the car and affecting the drivers' livelihood.

Overall, it seems that the taxi and PHV driving community are aware of this message. The quantitative research shows that most are usually following this advice both to reduce fuel consumption and to reduce environmental impact. However, the qualitative research suggests that leaving the engine running means that drivers do not lose any work and also minimises damage to vehicles. This suggests that there may be a degree of over reporting compliance among drivers. However, it seems that both taxi and PHV drivers are receptive to this message. Frequent prompts may encourage higher levels of compliance.

D. Changing gear at lower revs

No PHV operators and only 6% of PHV drivers mention spontaneously that they try to change gears sensibly to minimise environmental impact. However, 89% of PHV owners and operators, and 94% of PHV drivers say they are aware that you can save fuel by changing gear at lower revs when prompted. When asked if they actually do change gears at lower revs to reduce fuel consumption:

- Around half (48%) of PHV drivers say they always do
- 13% say they usually do
- 10% say they sometimes do
- 7% say they never do
- Almost one in four (22%) say they don't know.

Chart 16 - Frequency of saving fuel by changing gear at lower revs



■ Always ■ Usually ■ Sometimes ■ Never ■ Don't know

Source: Q32 (2) All PHV Drivers (224)

In the qualitative research, we found that no PHV operators or taxi fleet owners encourage drivers to change gear at low revs. It was acknowledged that although changing gears at lower revs may be beneficial to the environment and reduce fuel consumption it may have a negative impact on the passenger's journey. It seems that the PHV driver community is receptive to the message. It will also be news to some drivers. Consequently, there may be scope for this message to have a demonstrable impact. This question was only asked to PHV Drivers as most taxi drivers mainly drive automatic vehicles.

4.4.2 Vehicle maintenance to minimise fuel consumption / environmental impact

A. Regularly servicing vehicles

Among taxi and PHV owners/operators who say they actively encourage drivers to drive in a way that reduces fuel consumption / minimises environmental impact:

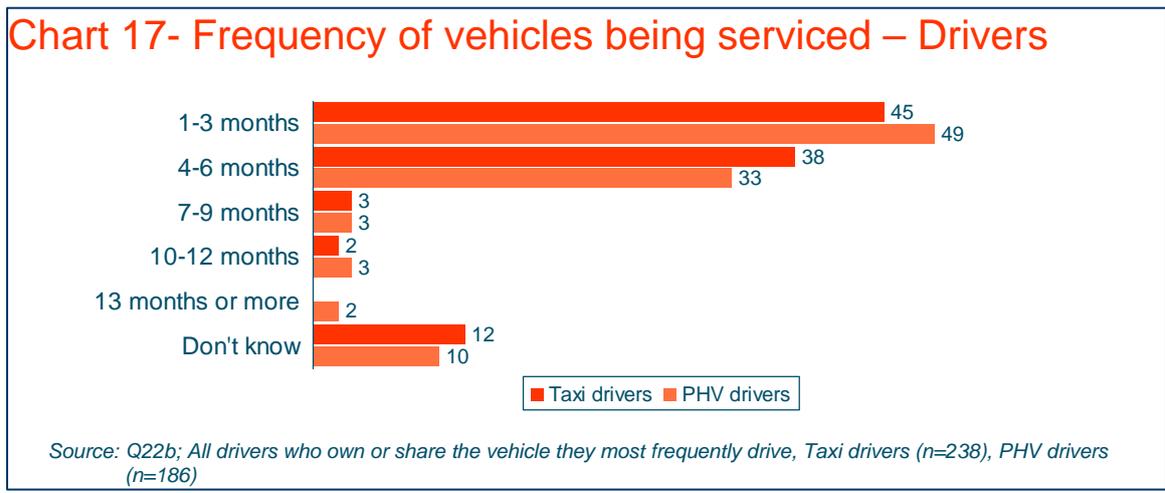
- 13% spontaneously say they keep their vehicles in good working order to reduce fuel consumption (e.g. tyre pressure, oil filters, etc).
- 15% spontaneously say they keep their vehicles in good working order to minimise environmental impact (e.g. tyre pressure, oil filters, etc).

Similarly, 9% of taxi drivers and 8% of PHV drivers spontaneously say they keep the vehicle in good working order to reduce fuel consumption. One in ten (10%) of taxi drivers and 15% of PHV drivers say spontaneously that they make sure their vehicle is regularly serviced to minimise environmental impact.

When prompted, almost all (98%) taxi and PHV owners/operators, taxi drivers (98%), and PHV drivers (99%) say they are aware that regular servicing helps vehicles run at optimum efficiency, helping to reduce fuel consumption.

One in ten PHV drivers (10%) and 12% of taxi drivers who own or share their vehicle say they don't know how frequently it is serviced. Almost half of both taxi and PHV drivers who own or share their vehicle say they get it serviced every one to three months (45% of taxi drivers and 49% of PHV drivers who own or share their vehicle). Around one in three says they get their vehicle serviced every four to six months (38% of taxi drivers and 33% of PHV drivers who own or share their vehicle). Almost all others say they get their vehicle services at least annually, with only three PHV drivers who own or share their vehicle that say they get their vehicle serviced every 13 months or more.

All licensed vehicles are required to have an annual inspection in order to carry passengers, until relatively recently taxi drivers were also required to have mid-year inspections. Therefore, all drivers would have had a check in the last year.



It seems that the taxi and PHV driver community knows the message and follows it. Frequent prompts may encourage greater compliance. The qualitative research supports these findings; PHV operators and taxi fleet owners say their vehicles get serviced on a regular basis to ensure the vehicle runs to maximum efficiency while also avoiding long term damage to the vehicle.

“The benefit is so we don’t have breakdowns and from that end, the engine performs properly and we’re looking after the life of the engine so that it has a nice long life and while it’s in service it’s performing to its optimum capacity” (Taxi operator, male)

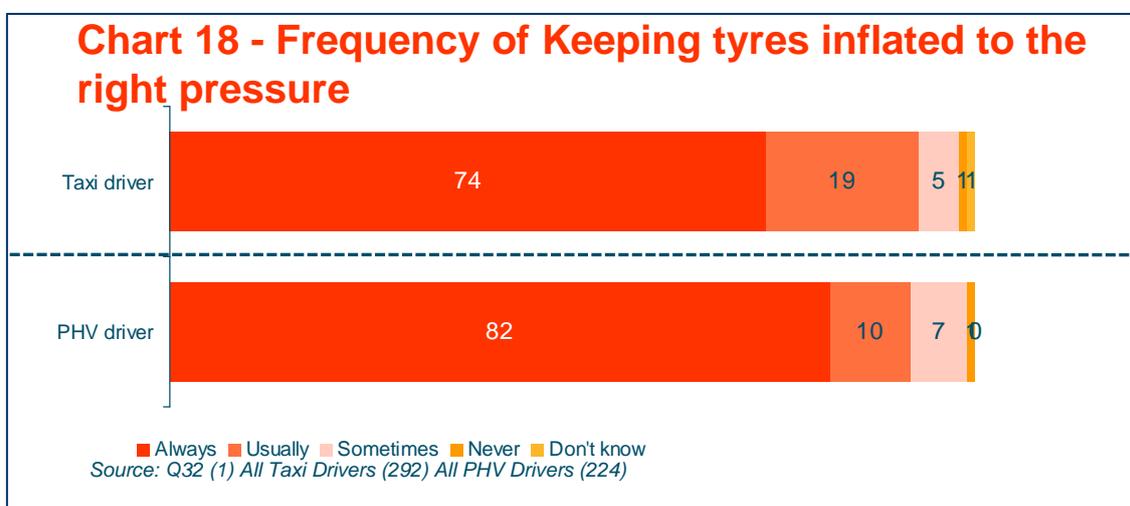
B. Keeping tyres inflated

Although few taxi and PHV owners/operators spontaneously mention advising drivers to keep tyres inflated to reduce fuel consumption, 13% spontaneously mention keeping the vehicle in good working order to reduce fuel consumption. In contrast, 9% of taxi drivers and 13% of PHV drivers spontaneously say that they keep tyres inflated to the correct pressure to minimise fuel consumption. Similarly, 9% of taxi drivers and 5% of PHV drivers say spontaneously that they keep tyres inflated to minimise environment impact.

When prompted, almost all (95%) taxi and PHV owners and operator, taxi drivers (98%) and PHV drivers (96%) say they are aware the keeping tyres inflated to the right pressure helps to reduce fuel consumption.

Almost all taxi and PHV drivers say they always or usually seek to save fuel by keeping their tyres inflated to the right pressure:

- 74% of taxi drivers and 82% of PHV drivers say they always do. PHV drivers are more likely to always do this
- 19% of taxi drivers and 10% of PHV drivers say they usually do
- 5% of taxi drivers and 7% of PHV drivers say they sometimes do
- 1% of taxi drivers and 1% of PHV drivers say they never do
- 1% of taxi drivers and no PHV drivers say they don't know



Over half of taxi and PHV drivers say they check their tyre pressure weekly (52% and 57% respectively). Fifteen per cent of both taxi and PHV drivers say they check their tyre pressure fortnightly. Around one in five (21%) of taxi drivers and 16% of PHV drivers say they check their tyre pressure every three or four weeks. Very few say they check their tyre pressure less than once a month. Typically, on average taxi drivers check the tyre pressure every two and a half weeks whilst PHV drivers check roughly every three weeks.

In the qualitative research all PHV operators and taxi fleet owners were aware that keeping tyres inflated to the correct pressure is a valuable way of reducing fuel consumption. When asked about the benefits of this, the majority stated that the key benefit was saving drivers money.

*“From my experience the drivers that we have here will know precisely the state of their tyres, in terms of safety and fuel consumption, they are paying for the fuel themselves, so any hint we give them to maximise the fuel consumption will be looked upon as a friendly act”
(PHV operator and owner, male)*

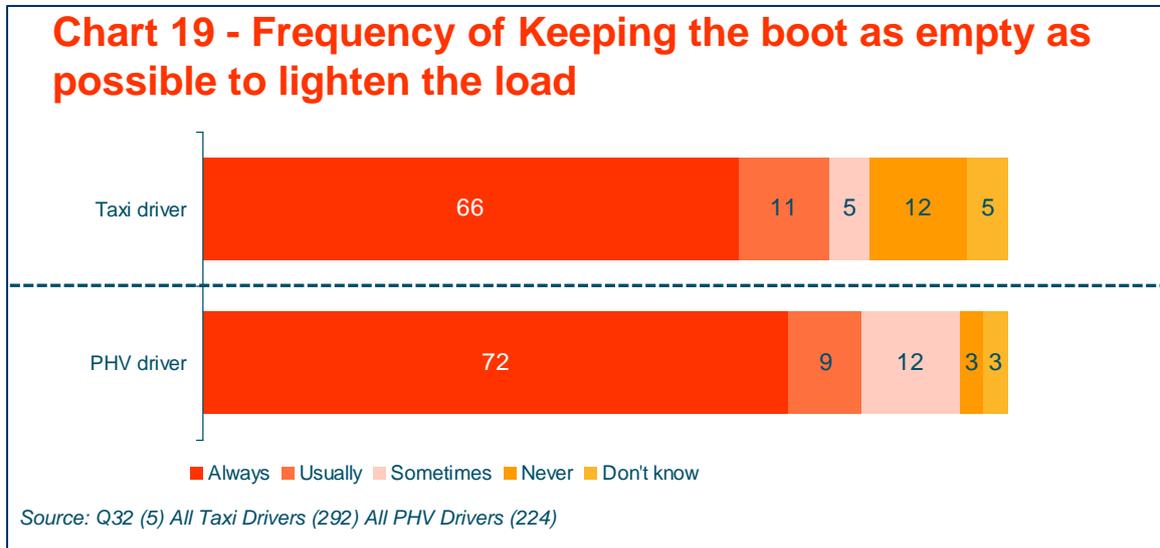
4.4.3 Other measures

A. Lightening the load by emptying the boot

Although not mentioned spontaneously, when prompted, 92% of taxi and PHV owners/operators, PHV drivers and 85% of taxi drivers, each say they are aware that lightening the load by emptying the boot reduces fuel consumption. When asked if they keep the boot as empty as possible to lighten the load:

- 66% of taxi drivers and 72% of PHV drivers say they always do
- 11% of taxi drivers and 9% of PHV drivers say they usually do
- 5% of taxi drivers and 12% of PHV drivers say they sometimes do

Only 12% of taxi drivers and 3% of PHV drivers say they never do and 5% of taxi drivers and 3% of PHV drivers say they don't know if they do or not. Taxi drivers are more likely to say they never keep the boot as empty as possible to lighten the load than PHV drivers.



It seems that both the Taxi and PHV driver communities are aware of the message and generally follows it, although there is a core group of taxi drivers who never seek to keep their boot as empty as possible to lighten the load. Frequent prompts may encourage even greater compliance.

For the majority, of PHV operators and taxi fleet owners participating in the qualitative research, keeping the boot empty is seen as standard practice for drivers as the boot is designed for passengers, not drivers. As a result, drivers are inherently driving with a lighter load, although again the key motivation is not the environment or cost, but rather passenger comfort.

“They do that, because the boot is not for them it’s for their passengers, a passenger comes up with a suitcase and expects an empty boot” (PHV operator and owner, male)

B. Other spontaneously cited measures

A range of other measures were cited spontaneously by taxi and PHV owners/operators and drivers in terms of minimising fuel consumption of environmental impact:

- Buying better/cleaner fuel
- Checking the fuel efficiency of vehicles
- Taking the shortest route

[Note: numbers were relatively low, so themes rather than percentages are reported.]

4.4.4 Summary of attitudes towards driving and the environment

To gain a better insight into attitudes towards driving and the environment among the PHV and taxi communities a cluster analysis was conducted. The clusters were derived from the responses to questions around attitudes towards driving and the environment.

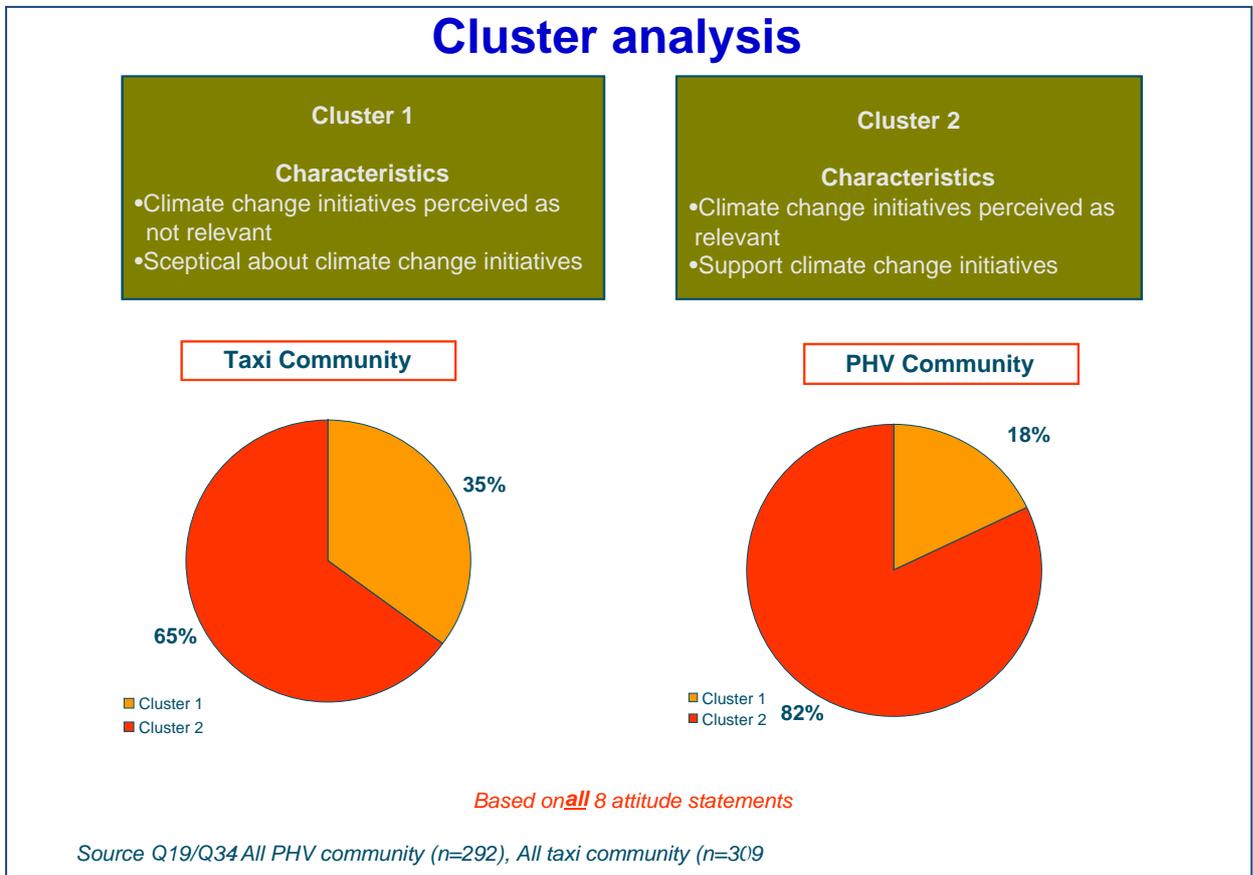
The cluster analysis identified the following two core groups:

Cluster 1

- People falling into cluster 1 tend to perceive climate change as not relevant to them and there is a general scepticism about climate change initiatives

Cluster 2

- Those in cluster 2 tend to perceive climate change as relevant to them and there is general support for climate change initiatives.



The cluster analysis supports the general theme of the research findings. Those from the PHV community are generally more positive and are significantly more likely to think that climate change initiatives are relevant to them (82%). Although there is some support for climate change initiatives among the taxi community (65%), there is a core group who do not acknowledge or support such initiatives (35%). Among the PHV community (18%), fewer people are negative about climate change initiatives.

4.5 Getting the message across

4.5.1 PCO branding

On balance, views are mixed, PCO branding for any promotion would either be positively received or may have limited impact. However, a minority of taxi and PHV owners/operators and drivers think PCO branding would diminish the effectiveness of any promotion (chart 20 shows this). In summary:

- The PHV community is generally more positive about PCO branding than the taxi community. Overall, over half of the PHV community (47% of owners/operators and 58% of PHV drivers) think the promotion of more environmentally friendly driving styles among taxi and PHV drivers would be more effective if it were clearly branded as coming from PCO. Among the taxi community, this view is held by 40%.

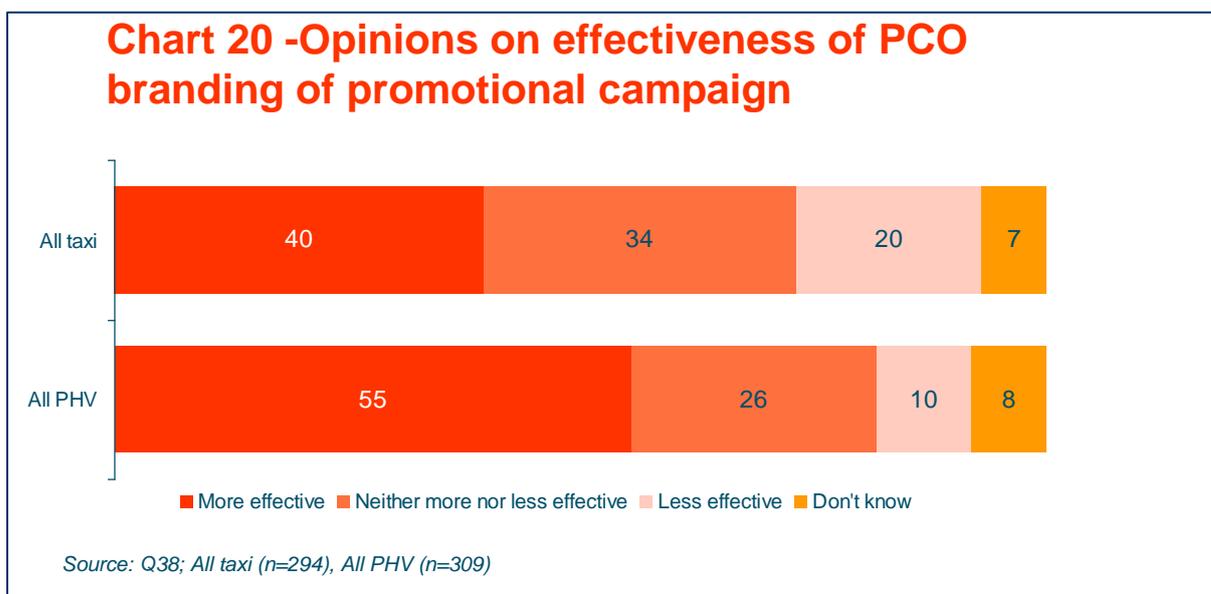
The qualitative research shows that for most PHV operators and taxi fleet owners, the PCO is seen as best placed to be involved with any campaign encouraging drivers to be more environmentally friendly due to their position as a governing body within the industry.

“The PCO are responsible for all private hire drivers in London, so they are the only body representing 46,000 drivers, so they are the first avenue of communication” (PHV operator and owner, male).

“Well the PCO have got access to all the drivers, so in terms of driving in a more environmentally friendly way, they can send a pamphlet or literature to drivers expressing the way that you drive like this, it will save the environment! Being honest I’d be shocked if they weren’t involved” (PHV operator and owner, male).

Although the PCO does not communicate directly with PHV drivers, there seems to be a belief that drivers would be open to this information. And as shown above, PHV drivers are more positive about PCO branding.

- Slightly fewer (26%) of those from the PHV communities think any promotion would be neither more nor less effective if clearly branded as coming from PCO (34% of owners/operators and 23% of PHV drivers). Similarly, a third of the taxi community (34%) did not have a strong view either way
- The taxi community (20%) is more likely than PHVs (10%) to think any communication would be less effective if it were PCO branded.



Perceptions of the effectiveness of PCO branding depends on:

- Perceptions of PCO generally and its credibility as a communicator of environmental messages
- The perceived effectiveness of any promotion to promote eco smarter driving
- The perceived effectiveness of environmental impact of any eco smarter driving measures

The main reasons why some taxi and PHV owners/operators and drivers think PCO branding would be effective are:

- They are the office body that regulates taxis and private hire vehicles (49% of PHV owners and operators, 42% of taxi drivers, and 47% of PHV drivers who consider PCO branding effective)
- Owners, operators and drivers take notice of what the PCO has to say (29% of PHV owners and operators, 41% of taxi drivers, and 17% of PHV drivers who consider PCO branding effective). Among those who think PCO branding would be effective, taxi drivers are significantly more likely to say drivers take notice of the PCO. So although fewer taxi drivers think PCO branding will be more effective, among those who do, the PCO is well regarded
- They have a good reputation with drivers (5% of taxi and PHV owners and operators, 14% of taxi drivers, and 5% of PHV drivers who consider PCO branding effective). This view is particularly common among the taxi driving community.

Very few people interviewed cited specific reasons why PCO branding would be ineffective (due to small bases, percentages are not given here). Similar reasons are cited for why PCO branding is considered neither more nor less effective or less effective overall. The main reasons mentioned are:

- A lack of respect for the PCO generally
- Lack of engagement among the taxi and PHV community with PCO communications generally
- The perceived lack of influence of any campaign or the perceived ineffectiveness of eco smarter driving

In the qualitative research, despite the positive reception from most, a minority feel strongly against the PCO being involved in any type of campaign message. This is primarily due to the fact that some people feel that it is not within the PCO's realm to try and encourage drivers to drive in a more environmentally friendly way. Consequently, PCO may want to explore options for co-branding any communications (e.g. with a relevant government

agency or environmental charity) to enhance perceptions of the provenance of any promotional activity.

4.5.2 Communication channels

When asked what methods would be most effective to communicate these messages to the taxi and PHV driving communities, a wide range of methods are cited. Six sources were more frequently cited spontaneously as most effective by taxi drivers:

- The most mentioned method is trade press (34%)
- Direct mail (18%)
- Leaflets and booklets (7 %)
- Advertising (6%)
- Talking directly to the taxi driver community (4%)
- Email (4%)

In the qualitative research, most PHV operators and taxi fleet owners believe that the message should be communicated through the trade press, as this is seen as the main media drivers get the most exposure to.

“The Taxi trade papers like the Globe, the majority of drivers read this stuff so once you’ve read it, the word will spread and take it from there” (Taxi operator, male)

As shown above, a third of taxi drivers mention trade press as the most effective method of communicating. Among the PHV community, significantly fewer people mention this.

Among the PHV drivers, the methods perceived as being the most effective to communicate driving techniques that are more environmentally friendly are:

- Direct mail (23%)
- Leaflets and booklets (8%)
- Trade press (7%)
- Advertising (4%)

- Talking directly to the PHV driver community (5%)
- Email (4%)

Among taxi and PHV owners/operators the cited as being the most effective to communicate driving techniques that are more environmentally friendly are:

- Direct mail (14%)
- Leaflets and booklets (13%)
- Trade press (6%)
- Advertising (6%)
- Talking directly to the PHV driver community (5%)
- Email (5%)

Information that PHV owners/operators and PHV and taxi drivers can digest in their own time is considered most likely to be considered effective and to be most likely to personally interest them. Taxi drivers appear unlikely to be willing to attend a talk or workshop, although this method appears popular among PHV drivers.

When asked how effective they thought specific communication methods would be and how likely they would be personally interested in them:

- Around seven in ten taxi and PHV owners/operators and drivers think an information leaflet in the post would be effective (69% of taxi and PHV owners/operators, 70% of taxi drivers, and 68% of PHV drivers).
 - Most say they are likely to be personally interested in a leaflet through the post (67% of taxi and PHV owners/operators, 72% of taxi drivers, and 76% of PHV drivers)
- A sizeable proportion of taxi and PHV owners/operators and PHV and taxi drivers think a free DVD showing environmentally friendly driving techniques would be effective (62% of PHV owners/operators, 57% of taxi drivers, and 71% of PHV drivers). PHV drivers are particularly likely to think that this type of communication would be effective than any other group
 - Most say they are likely to be personally interested in a DVD (67% of taxi and PHV owners and operators, 64% of taxi drivers, and 75% of PHV drivers). PHV drivers are

more likely to think a free DVD showing environmentally friendly driving techniques would be an effective communication tool and they are significantly likely to be personally interested in this

- Although a high proportion of PHV drivers think a workshop lasting up to 4 hours to provide tips about environmentally friendly driving to reduce fuel consumption and to reduce stress would be effective, other audiences are less convinced (62% of PHV drivers consider this effective, compared to 45% of PHV owners/operators, and 28% of taxi drivers)
 - Similarly, PHV drivers and perhaps to a lesser extent taxi and PHV owners/operators say they are likely to be personally interested in a four-hour workshop, but taxi drivers are notably less interested (55% of PHV drivers, 43% of PHV owners and Operators, and 17% of Taxi drivers)
- Although more than half of PHV drivers think a half-hour central London-based training session would be effective, other audiences are less convinced (58% of PHV drivers consider this effective, compared to 48% of PHV owners/operators, and 26% of taxi drivers)
 - Similarly, PHV drivers and PHV owners and operators are more likely to be personally interested in half-hour training session in central London, but taxi drivers are notably less interested (56% of PHV drivers, 51% of PHV owners/operators and 27% of taxi drivers)

The qualitative research findings show that PHV operators and fleet taxi owners are generally negative about the above communication methods, and most of the reservations are mainly around the time it would take to consume some of the suggested communications. Workshops were seen as very time consuming as drivers would have to take 4 hours out of their working day thus reducing their earnings. The half hour sessions are seen as more favourable as drivers would not need to take too much time out of their working day.

Chart 21 and 22 show perceived effectiveness of the various communication tools and likelihood of personally taking an interest in these types of communications.

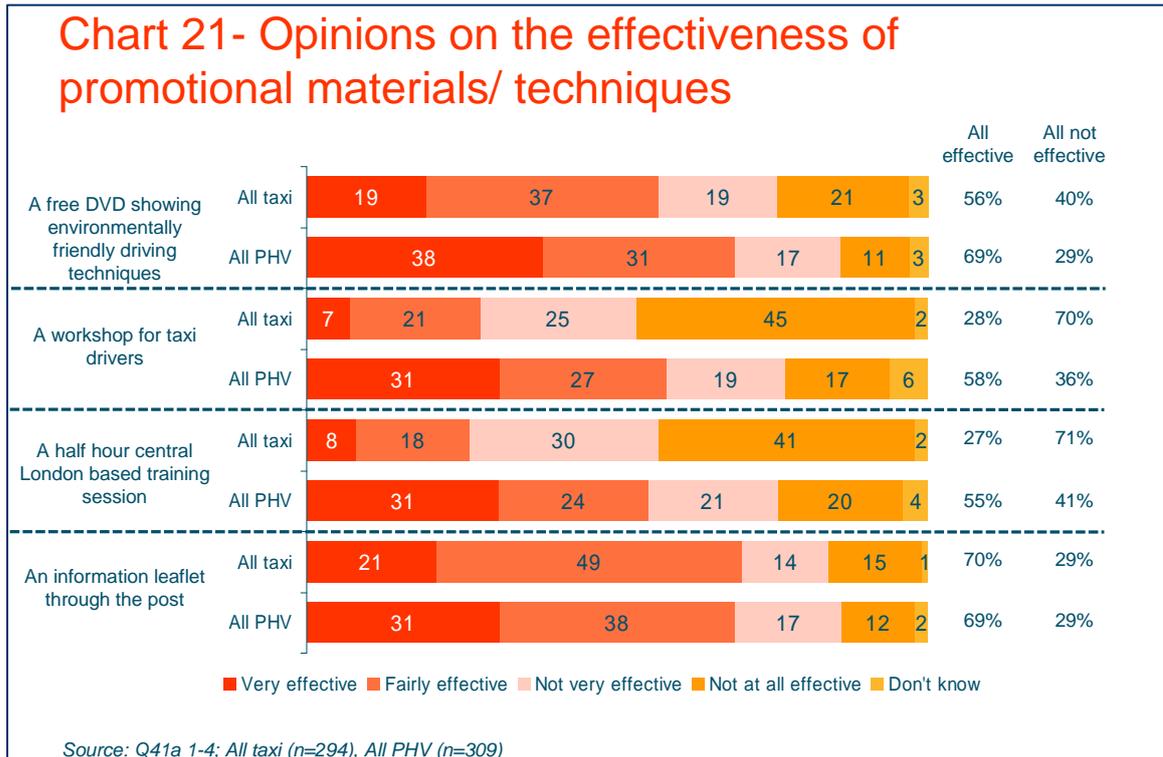
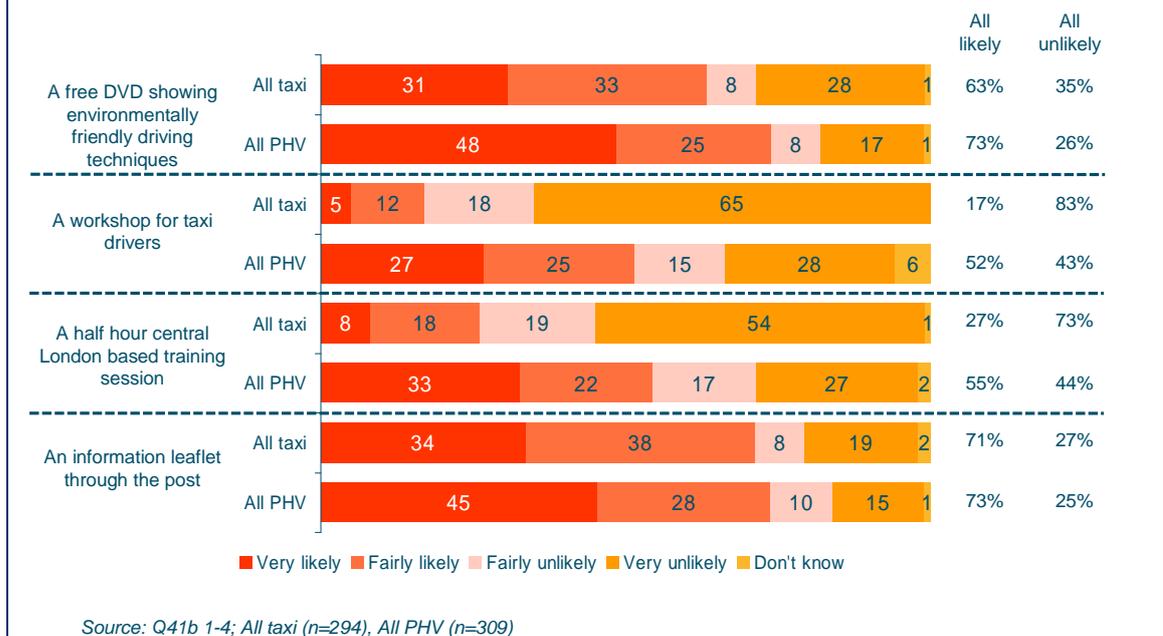


Chart 22 - Likelihood of taking an interest in promotional materials/ techniques



- Seven in ten PHV owners/operators and drivers think information from PHV operators to drivers would be effective (72% respectively)
 - PHV owners/operators think they are personally likely to be interested in information from operators to drivers (66% of PHV owners/operators and 72% of PHV drivers)
- Most PHV operators think training information for them to use to pass on information to drivers would be effective (69%)
 - They go on to say they are personally likely to be interested in training information for them to use with drivers (71%)

As discussed earlier in this chapter, PHV drivers are likely to favour more interactive communications like DVDs, workshops and training. It is therefore worth considering using some of these tools in the communications that will be passed on to drivers by PHV operators. Chart 23 and 24 show the perceived effectiveness of the various communication tools and the likelihood of personally taking an interest in these types of communications.

The qualitative research shows the PHV operators as being particularly likely to think that they can pass training information on to drivers. This method of communication is seen as the most effective way to promote a message of driving in an environmentally friendly way. Primarily, operators like that the message can be passed on 'in-house', and this is seen as preferential as drivers will not have to go out of their way to receive this information.

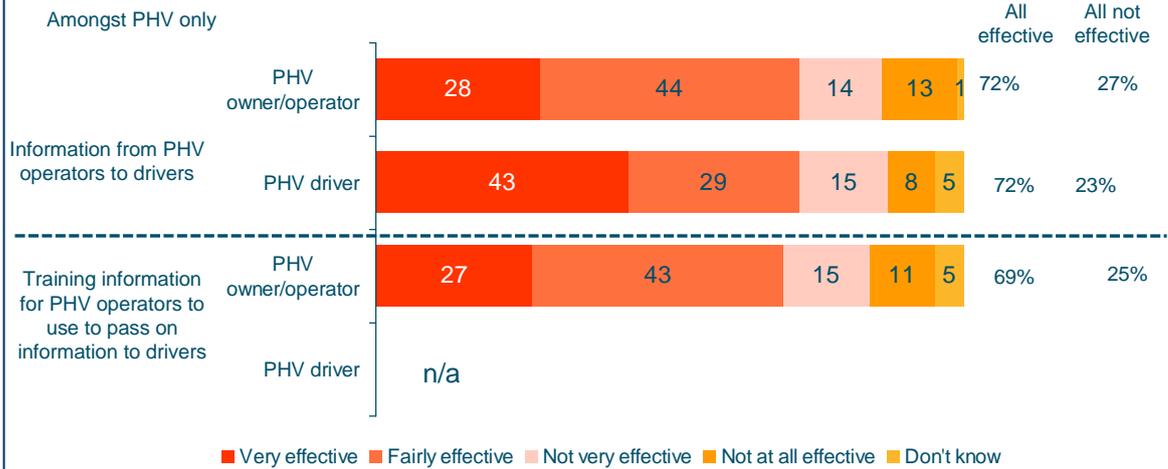
"We already do quite a lot to try and educate them on various things, it would certainly be easy enough for us to make them aware of some of these things and most importantly, they don't have to go out of their way, they can just do it here" (PHV operator and owner, male)

In addition, the convenience factor makes this a concept that is easy to promote and is not done in an enforcing manner.

The qualitative research also shows a general feeling that regardless of the source of the message, any communications need to be reinforced regularly to the drivers to ensure they are receptive to messages.

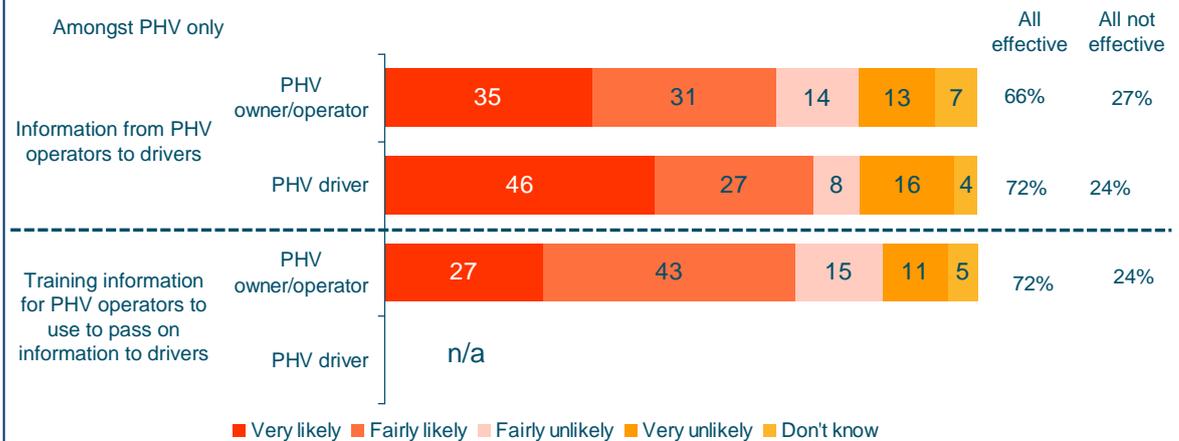
"I don't think people are going to take time out but what you should do is you should advertise in the trade press and just keep reinforcing the message, they're not going to go and actively look for it so you've got to shove it in front of their face" (PHV operator and owner, male)

Chart 23 - Opinions on the effectiveness of promotional materials/ techniques



Source: Q41a 5-6; PHV operator (n=75), PHV driver (n=224)

Chart 24 - Likelihood of taking an interest in promotional materials/ techniques



Source: Q41b 5-6; PHV operator only (n=75), PHV driver (n=224)

When spontaneously asked where they would go for further information about minimising fuel consumption and the impact on the environment, a wide range of sources were cited. The most frequently mentioned sources are as follows:

- The internet (46% of taxi and PHV owners/operators, 35% of taxi drivers, and 38% of PHV drivers). Although not statistically significant, proportionately more PHV owners/operators mention the internet; this group is more likely to be office based therefore are likely to have easier access
- Through staff in garages, e.g. mechanics (6% of taxi and PHV owners/operators , 6% of taxi drivers, and 12% of PHV drivers)
- Press and PR (5% of taxi and PHV owners/operators, 8% of taxi drivers, and 8% of PHV drivers)
- PCO information (5% of taxi and PHV owners/operators, 7% of taxi drivers, and 9% of PHV drivers)
- TV advertising (1% of taxi and PHV owners/operators, 5% of taxi drivers, and 4% of PHV drivers)
- Local government offices (7% of taxi and PHV owners/operators, 2% of taxi drivers, and 4% of PHV drivers).

Taxi drivers are twice as likely as other audiences to say they would not look for further information. In summary, 25% of taxi drivers compared to 11% taxi and PHV owners/operators and 13% of PHV drivers said they would not look for further information. White PHV owner/operators and drivers were significantly more likely than black and minority ethnic audiences to say they wouldn't look for further information (25% and 7% respectively).

Overall, while workshops and training may appeal to the PHV driving community, the taxi driving community is unlikely to attend. Media that taxi and PHV owners/operators and taxi drivers can engage with at home are more likely to appeal (e.g. DVDs, leaflets and booklets, direct mail, and the internet).

5 Conclusions

The majority of the PHV community and taxi drivers buy into environmental issues. However, PHV operators and drivers are even more likely to buy into environment messages than taxi drivers. Taxi drivers are as likely to be aware of eco smarter driving measures as PHV drivers and are generally as likely to be routinely employing them. This may be because eco smarter driving measures make good commercial sense, rather than any great importance that drivers place on them. Consequently, highlighting economic benefits of eco smarter driving measures as well as environmental benefits is likely to be key.

A minority of those interviewed - mainly taxi drivers - reject environmental messages, largely because they do not think the advice is practicable, they do not think it will make a difference, or they just do not care about environmental issues. Rejectors are in the minority and are perhaps not the primary target audience for any eco smarter driving promotion.

There is nearly universal prompted awareness of the main eco smarter driving measures. However, spontaneous awareness is comparatively low. Effective communication will help to make eco smarter driving measures more front of mind.

Awareness and/or thinking something is important does not necessarily translate into action. There is a consistent gap between those who are aware of eco smarter driving measures and those who routinely take such measures. Consequently, there is scope to motivate greater compliance with eco smarter driving measures.

Taxi and PHV drivers may find it easier to do some eco smarter driving measures than others. Both groups say they are routinely:

- Avoiding accelerating hard and breaking sharply
- Avoiding leaving the engine running unnecessarily
- Regularly servicing their vehicle and keeping tyres inflated to the correct pressure
- Lightening the load in the boot

Compliance with such measures is likely to be over-reported. However, over-reporting suggests that taxi and PHV drivers are engaged with this area and at least know they should be doing such things. Encouraging greater compliance of each of these eco smarter driving measures is likely to be effective.

Taxi drivers may actually find it easier to do specific measures than PHV drivers, who are under more commercial pressure to get to their destination quickly. For example, taxi drivers are more likely than PHV drivers to say both spontaneously and when prompted that they routinely avoid accelerating hard and breaking sharply. Because of the likelihood of commercial pressure on PHV drivers to get to their destination quickly, there may be a need to explore other initiatives which could lessen the burden that drivers experience. Taxi drivers do not have such pressures as their payments also take the time it takes to get to the end destination into account.

Taxi and PHV drivers with air conditioning are less likely to routinely minimise its use (broadly similar for each), e.g. because they think their customers want it. Similarly, PHV drivers are less likely to be changing the engine at lower revs; again this may be influenced by commercial pressure to get to the destination quickly. Engaging taxi and PHV drivers with messages that highlight the association with using air conditioning and changing gear at higher revs with fuel consumption and a negative impact on the environment may present a slightly greater challenge as a result.

Taxi fleet owners say they are not currently giving information, advice or support to drivers. They think their drivers are 'self-policing' because of economic benefits of eco smarter driving measures. Spontaneous awareness of eco smarter driving measures among PHV drivers is no higher (and in some cases lower) than taxi drivers. This therefore suggests a need for greater engagement with operators so that they can filter eco smarter driving techniques to drivers.

PHV operators and drivers agree that asking operators to pass on information to drivers will be effective, and most are personally interested in getting information in this way. PHV

operators seem as open as the driver community to environmental issues and messages. Consequently, there do not appear to be any major barriers to them passing on information about eco smarter driving measures.

PHV drivers and operators are more likely to think clear PCO branding will be effective than taxi drivers. Therefore, PCO may want to consider branding materials for taxi drivers differently to materials for PHV operators and drivers.

PHV and taxi drivers think leaflets through the post or a free DVD are effective and are personally interested in getting information in this way. However, taxi drivers are less likely to think workshops and short training courses are effective and as such, much less likely to be personally interested in them. However, there is some interest among PHV drivers in workshops and a short training course.

Taxi drivers are more likely to think that trade press would be a good way to communicate with them. Taxi fleet owners believe that messages communicated through the trade press would get the most exposure as the majority of drivers access them. Among the PHV community, very few spontaneously mention trade press as an effective way of communicating.

6 Appendix

6.1 Profiles

	Total	PHV Drivers	Taxi Owners and PHV Operators/Owners	Taxi Drivers
Total Number of interviews	603	292	87	224
Ethnicity				
White	68	40	48	96
BAME	30	58	47	3
Age				
18-24	1	*	3	-
25-34	8	15	10	3
35-44	21	22	25	19
45-54	34	34	32	35
55-64	24	23	24	25
65+	11	5	3	18
Gender				
Male	97	99	91	97
Female	3	1	9	3
Ownership status				
Own it		84		80
Lease		7		1
Owned by someone else		8		18

6.2 Additional data

Profile of vehicles

Among taxi and PHV drivers who own or share the vehicle they most frequently drive (base =424), the age of the vehicle they drive most frequently varies considerably. PHV drivers tend to own or share slightly newer vehicles compared to taxi drivers. In summary:

- One in four (25%) taxi drivers and 30% of PHV drivers who own or share the vehicle drives a car which is up to four years old
- One in five (20%) of taxi drivers one in three (33%) PHV drivers who own or share the vehicle drives a car which is four to six years old
- Around one in five (21%) taxi drivers and one in four (24%) PHV drivers who own or share the vehicle drives a car which is seven to nine years old
- One in four (23%) taxi drivers but only 12% of PHV drivers who own or share the vehicle drives a car which is 10 years old or more

Among taxi and PHV drivers who own or share the vehicle they most frequently drive (base =424), the age of the vehicle when they bought it also varies. PHV drivers are more likely to buy a slightly older car than a taxi driver. In summary:

- Over half (53%) of taxi drivers compared to 24% of PHV drivers who own or share their vehicle bought a new vehicle or one that was less than a year old
- One in four (24%) of taxi drivers compared to one in three (37%) PHV drivers who own or share their vehicle bought a vehicle that was one to three years old
- 13% of taxi drivers compared to one in four (26%) of PHV drivers who own or share their vehicle bought a vehicle that was four to six years old

- 6% of taxi drivers and 11% of PHV drivers who own or share their vehicle bought a vehicle that was seven to nine years old
- 3% of taxi drivers and 2% of PHV drivers who own or share their vehicle bought a vehicle that was ten years or older

Most taxi and PHV drivers who own or share their vehicle don't know when they plan to sell it (75% of taxi drivers compared to 53% of PHV drivers who own or share their vehicle). PHV drivers are more likely than taxi drivers who own or share their vehicle to plan to sell it in the next year (11% of tax drivers compared to 36% of PHV drivers who own or share their vehicle). Fourteen per cent of taxi drivers and 11% of PHV drivers who own or share their vehicle have in mind to sell their vehicle in the next 13 months or more.

6.3 Questionnaire

Smarter Driving Eco Maintenance draft questionnaire LICENSED TAXI DRIVERS AND OWNERS

[INTRO]

Can I speak to XXXX please?

Good morning/afternoon/evening. My name is XXX and I am calling from Synovate, an independent research agency. We are carrying out a survey on behalf of the Public Carriage Office about driving in the capital. Hopefully you have received a letter notifying you that we may telephone you.

It should take around 12 minutes to complete, depending on your answers. Would now be convenient or should I call back another time?

May I assure you that we are a member of the Market Research Society and follow their strict Code of Conduct. As such you will not be subject to follow-up sales of any kind & all your answers will remain confidential and be reported back to the Public Carriage Office as aggregated data.

[SAMPLE SCREENER]

[Taxi OWNER]

I'd now like to ask you some questions focusing on the black cabs which you own.

[PHV OPERATOR AND PHV OWNER]

I'd now like to ask you some questions focusing on the Private Hire Vehicles which you <<operate>> [IF PHV OPERATORS / << own>> [IF PHV OWNERS =].

[ASK OQ6-OQ7 if the respondent is a vehicle owner ('yes' at PHVS7 OR YES at TS6. IF 'NO' AT PHVS7 OR AT TS6, GO TO OQ8]

OQ6 Do you tend to sell your <<cabs>> [IF TAXI OWNER / <<PHVs>> [IF PHV SAMPLE] when they reach a particular age?

1. Yes [Go to OQ7]
2. No [Go to OQ8]

3. (Don't know) [Go to QQ8]

QQ7 At what age do you aim to sell your << cabs>> [IF TAXI OWNER] / << PHVs>>[IF PHV OPERATORS OR PHV OWNERS] ?

Write in target age _____ years
(Don't know)

ASK ALL TAXI OWNERS/ PHV OPERATORS/ PHV OWNERS

QQ8 Typically, how frequently are your vehicles serviced?

Every _____ write in number of months
(Don't know)

QQ9 Do your << black cabs>> [IF TAXI SAMPLE] / <<PHVs>> [IF PHV SAMPLE] have air conditioning?

1. Yes, all
2. Yes, some
3. No, none
4. (Don't know)

QQ10 How important is it to you that your drivers drive in a way that minimises fuel consumption? Would you say...

READ OUT AND CODE ONE ONLY

1. Very important
2. Fairly important
3. Fairly unimportant
4. Very unimportant
5. (Don't know)

**QQ11 Why do you say that?
[OPEN]**

OQ12 To what extent do you actively encourage drivers to drive in a way that minimises fuel consumption? Would you say...

READ OUT AND CODE ONE ONLY

1. To a great extent
2. To some extent
3. A little
4. Virtually not at all
5. (Don't know)

[ASK OQ13 IF CODED 1 OR 2 AT OQ12]

OQ13 What steps, if any, do you take to encourage your drivers to minimise fuel consumption?

[OPEN]

ASK ALL TAXI OWNERS/ PHV OPERATORS/ PHV OWNERS AS DETERMINED AT HIERACHY

OQ14 How important is it to you that your drivers drive in a way that minimises the impact on the environment? Would you say..

READ OUT AND CODE ONE ONLY

1. Very important
2. Fairly important
3. Fairly unimportant
4. Very unimportant
5. (Don't know)

OQ15 Why do you say that?

[OPEN]

PROBE FOR ANYTHING ELSE

OQ16 To what extent do you actively encourage drivers to drive in a way that minimises the impact on the environment? Would you say...

READ OUT AND CODE ONE ONLY

1. To a great extent
2. To some extent
3. A little
4. Virtually not at all
5. (Don't know)

[ASK Q17 IF CODED 1 OR 2 AT Q16]

OQ17 What steps, if any, do you take to encourage your drivers to drive in a way that minimises the impact on the environment?

[OPEN]

PROBE FOR ANYTHING ELSE

ASK ALL TAXI OWNERS/ PHV OPERATORS/ PHV OWNERS AS DETERMINED AT HIERACHY

OQ18 Are you aware that:

[STATEMENTS TO BE RANDOMISED]

1) *Keeping tyres inflated to the right pressure helps reduce fuel consumption*

2) *You can save fuel by changing gear at lower revs [ASK PHV OPERATORS AND OWNERS ONLY]*

3) *Avoiding sharp acceleration and heavy braking reduces fuel consumption*

4) *Avoiding sharp acceleration and heavy braking reduces CO2 emissions*

5) *Use of air conditioning uses more fuel (ASK ALL PHV OWNERS AND OPERATORS AND (applicable for TAXI OWNERS answering 'YES'(CODE 1 OR 2) at OQ9)*

6) *Regular servicing helps vehicles run at optimum efficiency, helping to reduce fuel consumption*

7) *Lightening the load by emptying the boot reduces fuel consumption*

8) *Leaving the engine running unnecessarily can waste a lot of fuel*

1. Yes
2. No
3. (Don't know)

OQ19 Here are some statements that might be used to describe attitudes towards driving and the environment.

For each statement we would like you to state which phrase on the following list best describes your opinion. There is no right or wrong answer. It is your personal opinion we are interested in.

[RANDOMISE ORDER OF STATEMENTS]

READ OUT THE SCALE [ON FIRST STATEMENT]

REMIND THE SCALE IF NECESSARY [ON SUBSEQUENT STATEMENTS]

	Disagree Strongly	Disagree a little	Neither agree nor disagree	Agree a little	Agree Strongly	Don't Know
A. Climate change is talked about too much in the news	1	2	3	4	5	6
B. I don't believe that I can make a difference to the environment	1	2	3	4	5	6
C. Environmental threats such as global warming have been exaggerated	1	2	3	4	5	6
D. I believe there is a direct link between climate change and petrol consumption	1	2	3	4	5	6
E. I believe there is a strong link between CO2 emissions from vehicles and climate change	1	2	3	4	5	6
F. I believe that climate change is a problem that should be taken seriously	1	2	3	4	5	6
G. I try and drive in a way that is good for the environment	1	2	3	4	5	6
H. The way I drive has an impact on the environment	1	2	3	4	5	6

DRIVERS SECTION

TAXI DRIVER ROUTING = IF TS4 IS CODE 1,2,3 OR 4

PHV DRIVER SAMPLE = IF PHVS5 IS CODE 1, 2, 3 OR 4

[ASK TAXI AND PHV DRIVERS]

[Questions 20-23 are for those DRIVERS who own the black cab that they most frequently drive [own or share at TS5= codes 1 or 2].

AND

For those DRIVERS who own the PHV that they most frequently drive [own at PHVS6= code1]

I'd now like to ask you some questions focusing on the <<black taxi >> [IF TAXI DRIVER] / <<Private Hire Vehicle>> [IF PHV DRIVER which you most frequently drive.

Q20 How old is this vehicle?

WRITE IN NUMBER OF YEARS

IF LESS THAN A YEAR OLD, CODE '0'

(Don't know)

Q21 How old was it when you bought it?

WRITE IN NUMBER OF YEARS

IF BRAND NEW OR UNDER A YEAR, CODE '0'

(Don't know)

Q22A Do you have in mind when you are likely to sell the vehicle?

WRITE IN NUMBER OF MONTHS AND OR YEARS

YEARS

MONTHS

(Don't know)

Q22B Typically, how frequently is the vehicle serviced?

WRITE IN NUMBER OF MONTHS

Every _____ months

ASK ALL TAXI DRIVERS AND PHV DRIVERS

Q23A Typically, how frequently do you check the tyre pressure?

ENSURE THAT ANSWER IS CORRECTLY RECORDED IN WEEKS OR MONTHS IN LINE WITH THE WAY THE RESPONDENT CHOSE TO ANSWER.

1. Every _____ weeks
2. Every _____ months
3. Never
4. (Don't know)

Q23B Does the vehicle have air conditioning?

1. Yes
2. No

Q24 How important is it to you to drive in a way that minimises fuel consumption? Would you say...

READ OUT AND CODE ONE ONLY

1. Very important
2. Fairly important
3. Fairly unimportant
4. Very unimportant
5. (Don't know)

Q25 Why do you say that?

[OPEN]

PROBE FOR ANYTHING ELSE

**Q26 Do you drive in a way that seeks to minimise fuel consumption?
READ OUT AND CODE ONE ONLY**

1. Always
2. Usually
3. Sometimes
4. Never
5. (Don't know)

[ASK Q27 AND Q28 IF CODE 1, 2 OR 3 AT Q26. OTHERS GO TO Q29]

Q27 What steps do you take to minimise fuel consumption?

**[OPEN]
PROBE FOR ANYTHING ELSE**

Q28 What are the main problems you experience when trying to minimise fuel consumption?

**[OPEN]
PROBE FOR ANYTHING ELSE**

ASK ALL TAXI DRIVERS AND PHV DRIVERS

Q29 How important is it to you to drive in a way that minimises the impact on the environment?

1. Very important
2. Fairly important
3. Fairly unimportant
4. Very unimportant
5. (Don't know)

Q29b Why do you say that?

[OPEN]

Q30 Do you drive in a way that seeks to minimise the impact on the environment?

1. Always
2. Usually
3. Sometimes
4. Never
5. (Don't know)

[ASK Q31 IF CODE 1, 2 OR 3 AT Q30. OTHERS GO TO Q32]

Q31 What steps do you take to drive in a way that minimises the impact on the environment?

IF THE RESPONDENT SAYS THAT THESE ARE THE SAME AS AT Q27, PLEASE CHECK THAT EACH ONE APPLIES.

[PLEASE SHOW THE ANSWER BOX FROM Q27]

INTERVIEWER NOTE: IF THE RESPONDENT SAYS THAT THESE ARE THE SAME AS AT Q27, CONFIRM THE ANSWERS WITH THEM AND TYPE IN THE BOX
[OPEN]

Q32 Typically, when working, do you seek to

[STATEMENTS TO BE RANDOMISED]

- 1. Keep tyres inflated to the right pressure**
- 2. Save fuel by changing gear at lower revs (ASK PHV SAMPLE only)**
- 3. Avoid sharp acceleration**
- 4. Minimise use of air conditioning [ONLY ASK IF CODED 1 – YES AT Q23B]**
- 5. Keep the boot as empty as possible to lighten the load**
- 6. Avoid leaving the engine running unnecessarily**
- 7. Drive in a way that minimises the level of stress on yourself**
- 8. Drive in a way that minimises the level of stress on your passengers**

READ OUT AND CODE ONE ONLY

...Is that...

1. Always
2. Usually
3. Sometimes
4. or Never
5. (Don't know)

Q33 Are you aware that:

[STATEMENTS TO BE RANDOMISED]

- 1) ***Keeping tyres inflated to the right pressure helps reduce fuel consumption***
- 2) ***You can save fuel by changing gear at lower revs (ASK PHV DRIVERS ONLY)***
- 3) ***Avoiding sharp acceleration and heavy braking reduces fuel consumption***
- 4) ***Avoiding sharp acceleration and heavy braking reduces CO2 emissions***
- 5) ***Use of air conditioning uses more fuel [ASK ONLY THOSE CODING 1- YES at Q23B)***
- 6) ***Regular servicing helps vehicles run at optimum efficiency, helping to reduce fuel consumption***
- 7) ***Lightening the load by emptying the boot reduces fuel consumption***
- 8) ***Leaving the engine running unnecessarily can waste a lot of fuel***

1. Yes
2. No
3. (Don't know)

Q34 Here are some statements that might be used to describe attitudes towards driving and the environment.

For each statement we would like you to state which phrase on the following list best describes your opinion. There is no right or wrong answer. It is your personal opinion we are interested in.

[RANDOMISE ORDER OF STATEMENTS]

READ OUT THE SCALE [ON FIRST STATEMENT]

REMINDE THE SCALE IF NECESSARY [ON SUBSEQUENT STATEMENTS]

	Disagree Strongly	Disagree a little	Neither agree nor disagree	Agree a little	Agree Strongly	Don't Know
A. Climate change is talked about too much in the news	1	2	3	4	5	6
B. I don't believe that I can make a difference to the environment	1	2	3	4	5	6
C. Environmental threats such as global warming have been exaggerated	1	2	3	4	5	6
D. I believe there is a direct link between climate change and petrol consumption	1	2	3	4	5	6
E. I believe there is a strong link between CO2 emissions from vehicles and climate change	1	2	3	4	5	6
F. I believe that climate change is a problem that should be taken seriously	1	2	3	4	5	6
G. I try and drive in a way that is good for the environment	1	2	3	4	5	6
F. The way I drive has an impact on the environment	1	2	3	4	5	6

[Q35 AND Q36 ONLY TO BE ASKED TO TAXI DRIVERS WHO OWN ANY OTHER BLACK CABS-Yes at TS6]. AND PHV DRIVERS WITH VEHICLES] WHICH ARE DRIVEN BY OTHER PEOPLE] -Yes at PHVS7

Thinking about the other << black cabs >>[IF TAXI DRIVER] / <<Private Hire Vehicles>> [IF PHV DRIVER] which you own and which are driven by others:

Q35 To what extent do you actively encourage drivers to drive in a way that minimises fuel consumption? Would you say...

READ OUT AND CODE ONE ONLY

1. To a great extent
2. To some extent
3. A little
4. Virtually not at all
5. (Don't know)

Q36 To what extent do you actively encourage drivers to drive in a way that minimises the impact on the environment? Would you say...

READ OUT AND CODE ONE ONLY

1. To a great extent
2. To some extent
3. A little
4. Virtually not at all
5. (Don't know)

[ASK ALL SAMPLE TYPES]

Can I please ask you...

Q37a To what extent you feel the <<taxi>> {IF TAXI DRIVERS OR TAXI OWNERS} <<PHV>> {IF PHV DRIVER, OWNER OR PHV OPERATOR} driving community needs encouragement to drive in a way that minimises the impact on the environment? Would you say....

Q37b) To what extent you feel the <<taxi>> {IF TAXI DRIVERS OR TAXI OWNERS} <<Phv>> {IF PHV DRIVER, PHV OWNER OR PHV OPERATOR} driving community would be receptive to this encouragement? Would you say...

READ OUT AND CODE ONE ONLY

1. To a great extent
2. To some extent
3. A little
4. (Virtually) not at all
5. (Don't know)

Q38 Do you think that the promotion of a driving style among <<taxi>> {IF TAXI DRIVERS OR TAXI OWNERS} <<PHV>> {IF PHV DRIVER, OWNER OR PHV OPERATOR} drivers that is more environmentally friendly will be... ?

READ OUT AND CODE ONE ONLY

1. More effective if the promotion materials are clearly branded as coming from the PCO
2. Less effective if the promotion materials are clearly branded as coming from the PCO
3. Neither more nor less effective if the promotion materials are clearly branded as coming from the PCO
4. (Don't know)

Q39 Why do you say that?

[OPEN]

PROBE FOR ANYTHING ELSE AND WRITE IN RESPONSE

Q40 What method would you recommend to most effectively communicate these messages to the <<taxi>> {IF TAXI DRIVERS OR TAXI OWNERS} <<PHV>> {IF PHV DRIVER, OWNER OR PHV OPERATOR} driving community?

[OPEN]

PROBE FOR ANYTHING ELSE AND WRITE IN RESPONSE

READ OUT

I am now going to read out some statements around communication methods which are under consideration:

Q41A How effective you think the following would be to communicate with the taxi driving community about driving in a way that minimises the impact on the environment?

RANDOMISE STATEMENTS

1. A free DVD showing environmentally friendly driving techniques

2. A workshop for taxi drivers lasting up to 4 hours in various locations around London to provide tips about environmentally friendly driving, reducing fuel consumption and reducing stress

3. A half hour central London based training session

4. An information leaflet through the post

[ASK All PHV DRIVERS, PHV OWNERS AND PHV OPERATORS ONLY]: 5. Information from PHV operators to drivers

[All PHV OPERATORS ONLY]:

1. Training information for PHV operators to use to pass on information to drivers

Would you say it would be...

READ OUT AND CODE ONE ONLY

1. ...Very effective

2. Fairly effective

3. Not very effective

4. Not at all effective

5. (Don't know)

Q41B And how likely would you personally be interested in these communication methods?

RANDOMISE STATEMENTS

1. A free DVD showing environmentally friendly driving techniques

2. A workshop for taxi drivers lasting up to 4 hours in various locations around London to provide tips about environmentally friendly driving, reducing fuel consumption and reducing stress

3. A half hour central London based training session

4. An information leaflet through the post

[ASK ALL PHV DRIVERS, PHV OWNERS AND PHV OPERATORS ONLY]: 5.Information from PHV operators to drivers

[All PHV OPERATORS ONLY]:

6. Training information for PHV operators to use to pass on information to drivers

Would you say it would be...

READ OUT AND CODE ONE ONLY

1. Very likely
2. Fairly likely
3. Fairly unlikely
4. Very unlikely
5. (Don't know)

Q42 Where would you go to get further information about minimising fuel consumption and the impact on the environment?

[OPEN]

PROBE FOR ANYTHING ELSE AND WRITE IN RESPONSE

Before we finish, I'd like to ask you a few questions about yourself.

Please remember that all answers you give are anonymous. Your personal details will not be passed on to the Public Carriage Office.

Q43 So firstly, which of the following age groups do you fall into?

1. 18-24
2. 25-34
3. 35-44
4. 45-54
5. 55-64
6. 65+
7. (Would rather not say)

Q44 Code without asking:

1. Female
2. Male

Q45 How would you best describe your ethnic group?

White

1. White – White British
2. White – Other White background

Mixed

3. Mixed – White and Black Caribbean
4. Mixed – White and Black African
5. Mixed – White and Asian
6. Mixed – Any other mixed background

Asian / Asian British

7. Asian / Asian British – Indian
8. Asian / Asian British – Pakistani
9. Asian / Asian British – Bangladeshi
10. Asian / Asian British – Any other Asian background

Black / Black British

11. Black / Black British – Caribbean
12. Black / Black British – African
13. Black / Black British – Any other Black background

Other

14. Chinese
15. Any other ethnic background or ethnic group
16. (Don't know)
17. (Would rather not say)

Please note that your participation in this survey is anonymous, and, unless you authorise me to pass your individual details and survey answers on to the Public Carriage Office, this will not be done.

Q46 If The Public Carriage Office were to run some Smarter Driving Workshops which would last up to 4 hours in various locations around London to provide tips for drivers and owners about environmentally friendly driving, reducing fuel consumption and reducing stress. Is this something you might be interested in attending?

1. Yes – [Go to Q47]
2. No – [Go to Q48]

Q47 Do you authorise me to pass on your details and your attributed responses to the Public Carriage Office in order that they can consider you as a potential invitee to such a workshop?

1. Yes
2. No

Q48 Please note that your participation in this survey is anonymous, and your individual details and survey answers will not be provided to the Public Carriage Office.

In the unlikely event that we needed to contact you again relating to this project, would that be okay?

1. Yes
2. No

Q49 Transport for London often wish to speak to Londoners to obtain their opinion on transport issues. Would you be happy to take part in any future research?

1. Yes
2. No

STANDARD CLOSING SCRIPT