Additional measures to support individuals and businesses affected by local NO$_2$ plans

Summary of responses to the consultation

March 2018
Contents

1. Introduction.................................................................................................................................1
2. Government response to the consultation - The Clean Air Fund........................................2
3. Summary of responses..............................................................................................................13
4. Responses by question ............................................................................................................13
Annex A: List of responses from organisations.........................................................................28
1. Introduction

1. In July 2017, the government published the UK plan for tackling roadside nitrogen dioxide concentrations\(^1\) (subsequently referred to as ‘the NO\(_2\) Plan’). The NO\(_2\) Plan set out actions to bring nitrogen dioxide (NO\(_2\)) air pollution within statutory limits in the shortest possible time. The NO\(_2\) Plan requires a number of local authorities to develop and implement local plans to tackle pollution in their area and government has committed direct financial support to help local authorities implement these plans through a £255 million Implementation Fund. Where necessary to bring forward compliance with statutory limits in the shortest possible time, these local plans could include measures that have a distributional impact on individuals or businesses e.g. charging zones or vehicle bans.

2. At the 2017 Autumn Budget, government announced a £220 million Clean Air Fund which local authorities with the most challenging pollution problems will be able to bid into. The Clean Air Fund will provide an opportunity for these local authorities to take targeted action tailored to their area, with the aim of reducing the impact of their local plans on individuals and businesses. This could be by enabling the local authority to implement local plans that collectively impact on fewer people, by supporting people to switch to cleaner forms of transport or by providing direct support to those impacted. The government recognises that this could particularly provide support to private car drivers on lower incomes or other vehicle owners with limited travel alternatives.

3. On 22 November 2017 the government published a consultation on additional measures to support individuals and businesses affected by local NO\(_2\) plans. This consultation applied to England only. The consultation invited stakeholders to submit evidence on some of the potential measures that could be supported through the Clean Air Fund. This document provides the government’s response to this consultation. The responses to the consultation – summarised later in this document – have helped inform the design of the Clean Air Fund including the supporting guidance.

4. Alongside this document, government has formally launched the Clean Air Fund and issued detailed guidance to eligible local authorities developing local air quality plans. This guidance will help local authorities shape their bids into the Clean Air Fund in order to ensure they meet the fund’s objectives, as set out below. The guidance will be supplemented by ongoing input and support from government.

5. This is in addition to a range of funding available to support individuals and businesses to upgrade their vehicles or switch to other modes of transport, including the Plug In Car and Van grants, grants for electric vehicle charging and the Clean Bus Technology Fund.

2. Government response to the consultation - The Clean Air Fund

We’ve also published this section of the document separately alongside this, for ease of reference.

Objective of the Clean Air Fund

6. The Clean Air Fund’s objective is to support individuals and businesses affected by local nitrogen dioxide plans. Government has encouraged local authorities to prioritise approaches that achieve compliance with legal limits in the shortest possible time whilst minimising the impact on those living and working in and around the area. However, it is likely that in some cases local authorities will identify measures that could impact individuals and businesses – such as charging clean air zones – as the fastest means of achieving compliance. Depending on the scope of vehicles covered by such a zone this could particularly impact on low income families, small businesses and people living or working in a particular area. The objective of the Clean Air Fund is to help local authorities to support those impacted by their specific local plan. The objective can be delivered in three main ways:

a) By introducing measures that will make it easier, more attractive or more affordable for individuals and businesses to change to cleaner modes of transport that will not face any restrictions under local plans. For instance, if a local authority has concluded that reaching compliance will require it to restrict vehicle access to the city centre for three days each week, the Clean Air Fund could support measures that would make it easier to change to alternative modes of transport such as improving the cycling and walking infrastructure, boosting local bus services or supporting park and ride facilities. This would give individuals better options on days their cars are not a viable transport mode.

b) By enabling the local authority to implement local plans that collectively impact on fewer people. For example if a local authority identified the following two approaches that achieve compliance equally as quickly: a) implementing a class C charging Clean Air Zone; or b) implementing a class B charging Clean Air Zone.

2 Class C charging CAZ includes buses, coaches, taxis, private hire vehicles (PHVs), heavy goods vehicles (HGVs) and light goods vehicles (LGVs)
Zone\textsuperscript{4} and additional measures (for instance a freight consolidation centre). Option b) would impact less people as vans would no longer be in scope for charging but has an additional cost to fund the additional measures - the Clean Air Fund could potentially support these additional measures.

c) By reducing transport costs for people; for instance if a local authority identified that the measure that would bring forward compliance in the shortest time was a class D charging Clean Air Zone (which applies to all vehicle types), the Clean Air Fund could support local travel discounts for low income households in the area to help provide them with alternative transport options in the zone.

7. Evidencing the need for Clean Air Fund intervention will be part of local authorities developing their local plans, which will include an assessment of the distributional impacts i.e. how the proposed measures to reduce nitrogen dioxide pollution will impact different groups of individuals and businesses. A strong application from a local authority for the Clean Air Fund will both robustly evidence the need for funding by clearly setting out the impacts of the local plan on individuals and businesses, and establish how the proposals for the Clean Air Fund minimise these impacts.

**Funding available**

8. There is £220 million of funding available through the Clean Air Fund over the period of 2018/19 to 2020/21. It is our intention that successful local authorities will receive the funding award from the Clean Air Fund at the same time as they are awarded funding from the Implementation Fund. The funding may be paid out in tranches over several financial years.

9. Successful applicants to the Clean Air Fund will be expected to deliver measures supported through the fund in parallel to their local plan. Funding from the Clean Air Fund will be allocated on a rolling basis to support local authorities in delivering their plans in the shortest possible time.

10. Funding is allocated according to the quality of proposals, with particular importance being placed on the extent to which the Clean Air Fund bid addresses a real need (as evidenced by a distributional analysis). There is no upper limit for awards that can be made to any single authority and there is no guarantee of a minimum award. Clean Air Fund proposals will need to set out that the intervention has no negative

\textsuperscript{3} Class B charging CAZ includes uses, coaches, taxis, PHVs and HGVs

\textsuperscript{4} Further information on charging zone classes is available in section 7.4.1.1 of the NO\textsubscript{2} Plan: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/633270/air-quality-plan-detail.pdf
impact on air quality, that there is a clear rationale for intervention, that it addresses the spending objective, has a credible delivery plan and can demonstrate value for money.

11. English local authorities that are named in the UK Plan for Tackling Roadside Nitrogen Dioxide Concentrations as having to undertake feasibility studies are eligible to apply for support from the Clean Air Fund. The Greater London Authority has separate funding arrangements in place with HMG. London received a £5.7 billion settlement from the government for the period between 2016 and 2021 and has received a further £92 million for other measures to address air pollution, including low emission buses. Reflecting that previous funding to London, this new targeted fund is for local authorities outside London. Air quality is a devolved matter and local authorities in the devolved administrations are therefore not eligible to apply for the Clean Air Fund.

12. The Clean Air Fund was launched alongside publication of this response. The development, submission and assessment of proposals for the Clean Air Fund will happen as part of the development of the local plan feasibility studies. The five local authorities included in the 2015 plan for tackling nitrogen dioxide (Birmingham, Derby, Leeds, Nottingham and Southampton) will follow an accelerated version of this process as their business cases are already in progress.

Scope of the Fund

13. As set out in the consultation responses, there is broad support for a wide range of measures that could be funded through the Clean Air Fund. The most appropriate measures will depend on the local situation and the results of the local authority’s analysis of the distributional impacts in their plans. We have concluded that the Clean Air Fund should be intervention-neutral and outcome-focussed to enable local authorities to put forward proposals that best fit their local situation. Therefore, the Clean Air Fund could support a wide range of measures including, but not limited to:

- community-wide measures such as road layout changes, changes to cycling or walking infrastructure, improved public transport, park and ride schemes, promoting car clubs, vehicle retrofit; or better travel planning services; or
- measures aimed directly at supporting individuals or businesses such as local travel discounts (which could be linked to smart ticketing), cycle to work schemes, local scrappage schemes or support for upgrading to a new vehicle (including ultra low emission vehicles).

14. We will work closely with local authorities as they develop their proposals and will continue to facilitate the exchange of best practice between local authorities. Clean Air Fund proposals will need to set out:
• **Rationale for intervention:** Clearly set out the need for mitigation by providing a robust distributional analysis of the impact of local plans on individuals and businesses, following the options appraisal guidance.

• **Addressing the spending objective:** Clearly set out the way in which the projects proposed for Clean Air Fund address these impacts and reduce them.

• **Value for money:** Demonstrate strong value for money by setting out how the investment made will deliver benefits that meet the Fund’s objectives. Proposals will also have to demonstrate additionality; that is funding will not be allocated to existing projects that have received financial support from central government. In cases where proposals include measures that could be funded through other government grants (e.g. electric vehicle chargepoint infrastructure) applications for the Clean Air Fund will have to demonstrate why this intervention should be funded through the Clean Air Fund rather than through alternative funding routes.

• **Deliverability:** Set out a credible delivery plan for the measures proposed, ensuring that these can be put in place alongside local plans to improve air quality.

• **Air quality impact:** Proposals must demonstrate that the identified interventions have no negative impact on air quality, and that the proposed mitigation measures do not endanger reaching compliance with the applicable limit values for pollutants (and do not delay reaching such compliance).

15. The text below summarises some of the ways that the Clean Air Fund could support individuals and businesses impacted by local air quality plans. The following examples are intended as illustrations of the types of measures that could be supported through the Clean Air Fund. They are not intended as a guide as to what measures are most likely to receive support. Local authorities will need to ensure that Clean Air Fund bids are in line with State Aid rules.

16. The text below summarises some of the ways that the Clean Air Fund could support individuals and businesses impacted by local air quality plans. The following examples are intended as illustrations of the types of measures that could be supported through the Clean Air Fund. They are not intended as a guide as to what measures are most likely to receive support.

17. The text below summarises some of the ways that the Clean Air Fund could support individuals and businesses impacted by local air quality plans. The following examples are intended as illustrations of the types of measures that could be supported through the Clean Air Fund. They are not intended as a guide as to what measures are most likely to receive support.
Buses/Coach companies and bus passengers

18. In a local authority where a charging Clean Air Zone is implemented, buses that do not meet the particular emissions standard would be subject to a charge to enter certain areas. In some instances this could mean that the bus operator has to pass the additional cost (either the charge to enter the Clean Air Zone or the cost of upgrading to a compliant vehicle that would not be subject to a charge) onto customers, which could mean fares are increased. Alternatively the bus company could determine that they do not wish to pay the charge and withdraw the service, again negatively impacting on individual's ability to switch to the bus. Measures funded through the Clean Air Fund could help maintain and improve the local bus offer and protect passengers from fare rises or reduced services.

19. Potential measures that could be funded through the Clean Air Fund could include: bus priority measures, vehicle upgrade/retrofit; smart travel planning measures; improving bus facilities; increasing services; or discounted fares for certain individuals.

Case Study: Real Time Passenger Information (RTPI) – East Sussex

East Sussex (with Brighton and Hove), using a total of £0.6 million of funding including support from the Local Sustainable Travel Fund, delivered Real Time Passenger Information (RTPI) screens for passengers at bus stops along the coastal transport corridor running east of Brighton to Eastbourne and established the core system for extension to the remainder of the county. Bus priority equipment linked to the RTPI system was installed at traffic lights. Peacehaven, Newhaven, Seaford and Eastbourne have 57 RTPI signs at bus stops. This information is also available online and on phone apps (utilising existing services, such as Traveline). In addition, key junctions have bus priority signals.

Measures which make it easier for individuals to switch their mode of transport, for example by improved provision of transport information, could be supported through the Clean Air Fund. Support for Personalised Travel Planning measures could help individuals affected by local air quality plans to better understand the cleaner transport options available and how best to utilise these.

New RTPI screen for passengers waiting for buses at Trinity Place in Eastbourne.

Credits: East Sussex County Council
Case Study: Bradford City Council bus selective catalytic reduction retrofit project

In 2014, the government awarded Bradford Metropolitan Council £394,998 from the Clean Vehicle Technology Fund to retrofit eleven Euro III double deck buses and fourteen Euro III single deck buses with selective catalytic reduction technology. The technology was allocated to double deck bus routes which would achieve the largest reductions in city centre emissions and a clean bus corridor was created with the single deck buses. The fitments were completed in December 2015. Sensors on two retrofitted buses showed 80%-96% reductions in emissions of nitrogen dioxide providing good evidence that the system was performing well under day-to-day driving conditions and thus delivering air quality benefits. Going forward funding will be directed towards technology accredited through the Clean Vehicle Retrofit Accreditation Scheme.

The Clean Air Fund could support measures to help buses meet the Clean Air Zone standards. This would mean the bus could drive into a charging Clean Air Zone without being subject to a charge, avoiding the risk of increasing fares or service closures.

HGVs/Freight drivers and companies

20. Potential air quality measures such as charging zones or access restrictions could also impact the freight and heavy duty sector. Potential measures to support freight operators to upgrade their vehicle or change their current patterns could include: freight consolidation centres; improving freight deliveries e.g. by changing mode, time of delivery or route; investing in alternative fuel refuelling; or HGV retrofit.

Case Study: West of England Partnership – freight consolidation

The Department of Transport’s Local Sustainable Travel Fund enabled the expansion of a pre-existing freight consolidation centre for Bristol and Bath, operated by DHL. During 2014/15, the freight consolidation scheme served 133 retailers in Bristol and Bath, preventing over 2,074 delivery trips to the two city centres and saving carbon dioxide emissions estimated at over 23,000 tonnes. In 2016, the annual NOx emission reductions in Bristol was 358.62kg. Electric vehicles have been used until recently but these vehicles are no longer in operation. They will be replaced by new electric vehicles. The Clean Air Fund could support measures such as a freight consolidation centre where a local authority’s plan impacts on the freight sector. Support could result in fewer vehicles having to enter a Clean Air Zone where a charge may apply.
Van drivers which could include small businesses

21. Van drivers, which includes sole traders and small businesses, could be impacted by local air quality measures in particular as the cost of upgrading to a compliant vehicle can be prohibitively expensive and options are restricted.

22. Potential measures could include: support for conversion to LPG, support for upgrade to electric vehicles; or local upgrade schemes.

Case Study: BDRS (Barnsley, Doncaster, Rotherham and Sheffield Combined Authority) – encouraging electric vehicle uptake for businesses

BDRS, with support from the Local Sustainable Travel Fund, has worked with businesses to encourage the take-up of electric vehicles, through grants towards the cost of electric vans or cars and towards the cost of installing charging points at business premises. A total of ten businesses took delivery of an electric vehicle during 2014/15, following appointment of npower as delivery partner.

Funding from the Clean Air Fund could help businesses upgrade to vehicles which would not be liable to a charge in a charging Clean Air Zone, for instance by offering businesses the chance to test vehicles before investing, subsidising electricity or provide preferential parking to electric vehicles. Bids for electric vehicle support through the Clean Air Fund would need to demonstrate that existing funding from the Office for Low Emission Vehicles could not be used and that there are no State Aid concerns.

Individuals who currently use a non-compliant car, which could include low income households, residents in a Clean Air Zone or commuters

23. Local authorities may decide they want to help specific groups of individuals for example low income households, residents or people travelling into the area for work where they are implementing measures that place charges or restrictions on cars.

24. Potential measures funded through the Clean Air Fund could encourage people to switch to other modes of transport such as: improving public transport infrastructure and services e.g. bus priority measures; smart travel planning measures; support for park and ride facilities; investment in cycling and walking infrastructure; discounted fares for certain individuals; increasing car club availability; or employee led schemes such workplace transport plans or cycle to work schemes.

25. Potential measures could also provide an incentive for individuals to upgrade their current vehicle, for example: support for schemes to encourage electric vehicle uptake or improved electric charging infrastructure.
Case study: Cycling Toolkit, Goole – East Riding of Yorkshire

Goole in East Riding received £4.8 million of funding from the Local Sustainable Travel Fund for five new cycle links between the town centre and outreach hubs. 275 cycle parking spaces were created in the town centre, along with the development of a distinctive “Get Moving Google” brand. In addition, bike shop discount vouchers and over 250 bike lights were provided to people who live and work locally. The funding helped to establish a bike recycling charity called R-Evolution, which helped to refurbish over 650 bikes in the first year which were then distributed at a low cost. The charity works in partnership with HM Prison Humber and helps to develop skills for disadvantaged people and rehabilitate individuals through life coaching, increasing employability skills and work opportunities to reduce re-offending. The funding provided through the Local Sustainable Travel Fund also set up local cycling groups, cycling training and personalised travel planning. As a result of the interventions, cycling to Goole schools increased by 4.7% from 2011-2014. The intervention in Goole is particularly effective because it combines a complementary mix of hard and soft interventions. Evidence suggests that a combination of measures are needed to achieve high levels of cycling and that infrastructural measures, although appear necessary, alone are not sufficient to bring about change. The Clean Air Fund could provide support for a combination of measures which encourage a modal shift to a cleaner form of transport. A successful shift could reduce the number of people impacted under local plans.

Case Study: Walk Once a Week (WoW) - Durham

Durham received a total of £4.8 million of funding, the majority of which was from the Local Sustainable Travel Fund, to lead a national project covering 13 local authorities that encouraged primary school children to walk to school, through a year-round incentive scheme based on collecting monthly pin badges designed by the pupils in a competition. 854 schools with 200,000 pupils have been engaged. The proportion of walking trips to school rose 12%-points, mirrored by a 12%-point fall in car trips.

Funding walking schemes through the Clean Air Fund could encourage individuals impacted by local air quality measures to change their behaviour and switch to a cleaner mode of transport. This could help individuals to avoid a charge that may be introduced in a Clean Air Zone.

Evidence shows walking tends to increase as income decreases\(^6\). In supporting measures which make it safer and easier for individuals to walk, you therefore may be able to target support to help lower income households.

Case Study: Dundee – Go Ultra Low City

Dundee is one of several cities enrolled in the government’s Go Ultra Low Programme. Like other Go Ultra Low Cities Dundee and its surrounding area have already taken steps to improve chargepoint infrastructure and now have 13 rapid chargers and over 50 fast chargers. To date 10% of Dundee’s taxis are electric.

As a government funded Go Ultra Low City Dundee is looking to become a model city for the uptake of electric vehicles (EVs), which includes electrifying its taxi fleet. Support from Go Ultra Low will further expand the city’s chargepoint infrastructure. In addition, local measures were implemented by the Council to encourage the uptake of EVs in Dundee including the provision of free electricity and free parking in Dundee County Council for all EVs from 2017. The council has also required that all new private hire vehicles must be 100% electric and has introduced EV only taxi ranks. In addition, a communication campaign was established called ‘Drive Dundee Electric’ which promotes the use of EVs through a dedicated website and Twitter account. The website contains helpful information on charging points, car club locations and the free parking scheme for EVs.

Funding from the Clean Air Fund could help taxi operators upgrade to vehicles which would not be liable to a charge in a charging Clean Air Zone, for instance by offering incentives that reduce the running costs of the vehicles and give drivers the chance to test vehicles before investing. Bids for electric vehicle support through the Clean Air Fund would need to demonstrate that existing funding from the Office for Low Emission Vehicles could not be used and that there are no State Aid concerns.

Taxi and private hire vehicle drivers

26. Local authorities may decide that extra support is needed to help taxi drivers adapt to a charge, especially as many taxi drivers are self-employed. Potential measures could include: taxi retrofit e.g. to LPG; or local upgrade schemes.
Case study: Birmingham City Council hackney carriage (traditional black cab) liquefied petroleum gas retrofit project

In 2014, the government awarded Birmingham City Council £500,000 from the Clean Vehicle Technology Fund to re-power and convert LTI TX1 and TX2 diesel hackney carriages (traditional black cabs) to liquid petroleum gas (LPG) to reduce nitrogen dioxide emissions in areas of highest pollution.

Between October 2014 and June 2016, a technical solution was developed whereby emission reduction achievement was proven and a local garage trained to perform the conversions. The solution involved replacing the existing diesel engine with a petrol engine (spark-ignition engine) converted to run on LPG.

By May 2017, the project was complete having locally converted a total of sixty-five highly polluting LTI TX1 (Euro 2) and LTI TX2 (Euro 3) hackney cabs with very high driver satisfaction. Tests indicated that the converted cabs met or exceeded the minimum emission standards in the Clean Air Zone Framework for England.

Before this project, there was no established and reliable supply chain for the conversion of taxis to LPG in Birmingham, nor local accredited skills for the installation of such a system. Development of a supply chain has been a key achievement.

Supporting this sort of conversion project through the Clean Air Fund could help taxi drivers enter a charging Clean Air Zone without paying a charge. This would allow taxi drivers to continue to operate without changes to their service. This is particularly important for taxi drivers as they would be affected by any class of charging Clean Air Zone introduced. In addition, many taxi drivers are self-employed and so are likely to be impacted by local plans.
3. Summary of responses

27. The consultation ran for six weeks from 22 November 2017 to 5 January 2018. 80 responses were received to the consultation, 71 responses from organisations and 9 responses from individuals. A list of organisations who responded to the consultation is set out in Annex A.

28. In addition, we have considered relevant responses to the consultation on the draft UK Air Quality Plan for tackling nitrogen dioxide emissions published in May 2017. This consultation received 745 consultation responses, many of which covered topics relevant to this consultation.

4. Responses by question

Question 1: Are there other policy options not set out in the consultation that should be considered in order to minimise the impact of local air quality interventions on individuals or businesses? This could include measures such as guidance or communications material. Please provide evidence to support your proposal. Any proposals should take into account the assessment criteria set out in the consultation.

Summary of responses

29. Responses to the consultation were largely supportive of the types of measures suggested for the Clean Air Fund in the consultation. Other suggestions included:

- Support for freight: for example, by developing freight consolidation centres with low or zero emission last mile delivery; improving loading options for delivery vehicles; moving freight onto rail or water; mapping/routing information for HGVs to ensure they use the most appropriate route; encouraging off peak travel e.g. incentives for night deliveries; or incentives for upgrading to zero emissions vehicles.

- Support for alternative fuels: for example, investing in infrastructure for Liquid Natural Gas (LNG), Compressed Natural Gas (CNG), Liquid Petroleum Gas (LPG) or hydrogen vehicle refuelling stations; support for conversion to LPG e.g. a grant scheme to stimulate the LPG market; advice from government to help people make an informed choice on alternative fuels; or using tax incentives to drive uptake of alternative fuels.

7 https://consult.defra.gov.uk/airquality/additional-measures/
• Road changes: for example, local infrastructure projects that improve traffic flow or reduce traffic by rerouting traffic via alternative routes; roadside messaging to encourage motorists to change route or switch to other transport where there is congestion; or reallocation of road space to favour public transport (e.g. bus lanes).

• Improved information and awareness raising including: ensuring people understand emissions before purchasing a vehicle e.g. through improved labelling or online look up tools; clearly communicating where a charging Clean Air Zone is being implemented with information to help impacted to upgrade their vehicle or change mode; or national communications campaign on clean air and smarter choices.

Government’s response

30. The Clean Air Fund has been designed to support locally tailored solutions, so local authorities will be able to bid for funding for the measures set out above as long as they set out how they meet the assessment criteria including rationale for intervention and value for money. For example, where a local authority identifies that there is a need to support the freight sector they may decide to apply to the Clean Air Fund to establish a local freight consolidation centre or invest in alternative fuel infrastructure to encourage a switch to cleaner vehicles. Or where a local authority wishes to improve the local bus offer to provide an alternative mode of transport to residents and commuters this could include development of bus priority measures such as bus lanes and improved information to encourage people to make the switch.

31. Alternative fuels have the potential to reduce vehicle emissions and we welcome the use and development of alternative fuels that improve air quality and reduce greenhouse gas emissions. DfT has gathered and analysed evidence on the air quality and greenhouse gas impacts of a range of existing and emerging transport energy sources. These include petrol, diesel, electricity, hydrogen, Compressed Natural Gas (CNG), Liquefied Natural Gas (LNG), Liquid Petroleum Gas (LPG) and biofuels. The outputs of this work will be provided in the forthcoming Government strategy on the pathway to zero emission road transport.

32. Given the development of Clean Air Zones, information enabling consumers to understand quickly and easily whether or not a given vehicle would potentially incur a charge is particularly important. As set out in the NO₂ Plan, the UK government is working to include this information on fuel efficiency labels before the first Clean Air Zones are in operation as well as undertaking a wider review of the vehicle label supported by the Low Carbon Vehicle Partnership (Low CVP). All of this will help support wider work on engaging the public about the environmental performance of vehicles and build understanding of Clean Air Zone requirements and how to comply with them. Further information will be set out in the Government strategy on the pathway to zero emission road transport.
33. A number of responses suggested the need for a national communications campaign on Clean Air. This will be considered further as part of the Clean Air Strategy, due to be published in Spring 2018.

Question 2: Please provide evidence on what else could be done to support people to upgrade or retrofit their vehicles in line with the assessment criteria set out in the consultation. If there are specific sectors that need support, please set out evidence to support this.

Please provide evidence on potential limitations to uptake (e.g. industry capacity, refuelling infrastructure, consumer acceptance, examples of where retrofit has not worked as expected) and evidence of environmental impacts and the costs of potential technology for different vehicle types.

Summary of responses

34. Responses to the consultation were broadly supportive of retrofit, in particular for buses, taxis and commercial vehicles. Key themes identified in the responses included:

- There was general support for retrofit for the bus and coach sectors, with responses setting out that the benefits were high. Some responses identified that there is a need for further funding and asked for confirmation that the Clean Air Fund will fund retrofit for buses. For smaller operators, it was identified that they may need support and advice on retrofit.

- There were mixed views on whether support should target taxi retrofit with some responses suggesting resources should focus on encouraging ultra-low emission taxis instead. Some responses suggested that taxis should be prioritised for support as many taxi drivers are self-employed and will be impacted by local air quality measures. Other responses flagged the potential for grant funding for LPG retrofit for black cabs.

- HGVs were identified as a vehicle type that could be impacted by local air quality measures. However some stakeholders flagged that no accredited retrofit technology was currently available and other concerns were raised, for example around maintenance of the equipment. Some local authorities stated that they would be keen to explore further the scope for HGV retrofit and would like to liaise with the sector. In particular responses raised the potential to develop a retrofit solution for specialist vehicles such as waste collection vehicles or emergency service vehicles.

- A number of responses set out the potential for van drivers to be significantly impacted by local air quality measures particularly small and medium
enterprises. However there were mixed views from stakeholders on whether there was a suitable retrofit solution for light goods vehicles – some responses indicated grant schemes to upgrade to a new vehicle would be more appropriate. Other suggestions included an LPG retrofit grant scheme and other government support to the LPG industry. No responses supported retrofit for cars, with responses identifying that there is not a commercially viable option available.

- A number of responses requested additional information on retrofit in order to be able to make informed decisions. In addition, responses were supportive of the Clean Vehicle Retrofit Accreditation Scheme but asked for it to be rolled out further and promoted to industry.

Government’s response

35. Retrofitting vehicles with pollution-reducing technology can offer a relatively low cost alternative to purchasing new low emission vehicles. It also reduces the incentive to relocate dirtier vehicles away from areas with the worst air quality problems and thus reduces overall emissions of nitrogen oxides. The government believes that the continued development, promotion and implementation of innovative retrofit technology will be an important element of reducing nitrogen dioxide concentrations in the short term and could also play a key role in supporting individuals and businesses impacted by local air quality measures. For example, where a charging Clean Air Zone is introduced, there could be a risk that local bus services dependent on older vehicles are reduced or fares increased in order to cover the charge. To avoid this, the Clean Air Fund could support retrofitting with accredited technology\(^8\) which would mean that vehicles would not be subject to a charge when driving within the Clean Air Zone. This would remove the risk of the service being reduced or the fares being increased, helping to support the provision of clean affordable transport in the area.

36. There is a small but successful retrofit industry in the UK which mainly focuses on larger vehicles. Several thousand vehicles have already been retrofitted in recent years under government grant programmes. Between 2013 and 2015, government awarded over £27 million to retrofit almost 3,000 of the oldest vehicles (mainly buses) under three schemes:

- £5 million was provided to Transport for London (TfL) to retrofit 900 buses;

- The Clean Bus Technology Fund (CBTF) which has provided £14.1 million (over 2013/14 and 2015/16) to support the retrofit of nearly 1,000 local buses; and

\(^8\) Technology accredited under the Clean Vehicle Retrofit Accreditation Scheme
• The Clean Vehicle Technology Fund (CVTF)\(^9\) which has provided £8 million (in 2014/15) to local and transport authorities to retrofit over 1,200 vehicles using innovative pollution reducing technologies in a range of vehicles (buses, taxis, vans, fire engines and ambulances).

37. In 2017, the government awarded £250,000 from the Air Quality Grant 2016/17 for retrofitting of Derby City Council’s heavy goods vehicle (HGV) fleet with emissions reduction technology. The government funds outlined in the previous paragraph have supported development of technologies and accreditation standards, particularly for buses, and the Air Quality Grant award is expected to support the development of retrofit technologies and accreditation standards for specialist HGVs such as refuse collection vehicles.

38. In 2017, the government committed a further £40 million for retrofitting buses and launched a further round of the Clean Bus Technology Fund 2017-19. The results of this competition were announced in February 2018 with twenty local authority-led projects being awarded a total of nearly £40 million to support retrofitting over 2,700 buses with accredited technologies. The government also committed a further £60 million to support the purchase of new low emission buses, £11.1 million of which was awarded in August 2017 for a further 153 low emission buses via the Low Emission Bus Scheme (LEBS) 2015. This is in addition to the £30.3 million previously allocated for 326 low emission buses via LEBS 2015. The government intends to launch a new scheme in 2018 to support the purchase of more low emission buses.

39. In addition to the funding above, we recognise that there is scope for retrofit to support individuals and businesses impacted by local air quality plans – including support for buses and other vehicle types such as coaches, HGVs, vans and black cabs. Local authorities can therefore apply for any vehicle type with accredited technology as part of bids for the Clean Air Fund. Ideally all buses contributing to exceedances of NO\(_2\) limits in those areas with the biggest problem should be replaced with new, low emission buses or retrofitted. We will work closely with interested stakeholders and local authorities to identify areas where bus retrofit could be a suitable option under the Clean Air Fund.

40. We also acknowledge responses asking for more information to help people make decisions on retrofit. In 2017, the Low Carbon Vehicle Partnership launched a Clean Vehicle Retrofit Accreditation Scheme (CVRAS) with government funding support. The CVRAS provides independent evidence that a vehicle retrofit technology will deliver the expected emissions reductions and air quality benefits. It

---

\(^9\) The government funded the Low Carbon Vehicle Partnership to carry out an evaluation of the CBTF and CVTF, a report of which is available here: https://www.lowcvp.org.uk/resource-library/reports-and-studies.htm
enables drivers, technology manufacturers, businesses and local authorities to be confident that accredited technologies provide the appropriate emissions reductions. Initially focussed on heavy duty vehicles – buses, coaches and heavy goods vehicles (HGVs) – the LowCVP has expanded the scheme to cover light duty vehicles – vans and hackney carriages (black cabs). Further details are available from the Energy Savings Trust.\textsuperscript{10} Stakeholders interested in retrofit can look for accredited technologies through this site. In response to requests for further information to help with decisions on retrofit, the government plans to work with LowCVP to ensure that there is up to date guidance available to local authorities on accredited retrofit technologies for reducing emissions of nitrogen oxides from other vehicles. This will build on the Low Carbon Vehicle Partnership’s Low Emission Bus Guide 2016\textsuperscript{11} which provides information on retrofit technologies for reducing emissions of nitrogen oxides from buses.

41. The government will also continue to work with local authorities implementing Clean Air Zones to ensure that vehicles retrofitted with accredited technologies can be identified and that the technologies are fitted and working appropriately.

Question 3: We welcome views from stakeholders on what else government and industry can do to support local authorities to encourage the uptake of ultra low emission vehicles.

Summary of responses

42. Responses to the consultations highlighted the importance of electric vehicles, with responses identifying that support could help people upgrade to electric vehicles or could help develop the necessary infrastructure. Key themes identified in the responses included:

- Support for schemes to encourage take up of ultra low emission vehicles (including cars, vans and taxis) and make them more affordable, e.g. support for purchase incentives such as the plug in car and van grants, opportunities to trial vehicles including extended vehicle trials for fleets, support for the second hand electric vehicle market including providing information and guidance on reduced business rates for firms operating ULEV fleets and other incentives such as discounted/free parking or priority lanes.

- Support for improvements to charging infrastructure (including rapid charging) and associated grid upgrades. This included support to ensure households without off-street parking can install charging infrastructure including flat blocks, addressing

\textsuperscript{10} \url{www.energysavingtrust.org.uk/business/transport/clean-vehicle-retrofit-accreditation-scheme-cvras}

\textsuperscript{11} \url{www.lowcvp.org.uk/projects/bus-working-group/lowemissionbusguide.htm}
issues associated with different suppliers such as different power cable connectors, considering the challenge of ongoing maintenance and operational costs, provide more clarity on how the infrastructure will be developed and by whom (including developing a sustainable business model working with industry) and supporting energy companies to upgrade and reinforce the local grid network. One response suggested that the Clean Air Fund should not fund electric vehicle charging points as there are already suitable funding streams.

- Further communications and awareness raising, including to address concerns for example around range anxiety or availability of charge points.
- Encourage public sector procurement of electric vehicles.
- Local authorities will be able to bid for funding from the Clean Air Fund to support projects to encourage the uptake of low emission vehicles where there is no other funding on offer to support a specific measure.

**Government response**

43. The government’s Office for Low Emission Vehicles (OLEV) offers a comprehensive package of support to enable the take up of Ultra Low Emission Vehicles (ULEVs). This will see nearly £1.5 billion of support invested over the period 2015-2020. This package of support includes grants for ULEV cars, vans, taxis, buses and motorcycles as well as grants for supporting consumers install charging infrastructure at home (for both new and second hand ULEVs) and funding for local authorities to support those households without off street parking. There is also support for businesses to install chargepoints at workplaces.

44. Full details on the funding and support available can be found at [www.gov.uk/olev](http://www.gov.uk/olev). The site also contains information on the tax benefits of ULEV ownership.

45. OLEV is funding eight local authorities across the country under its Go Ultra Low City Scheme. With regard to trialling ULEVs, Milton Keynes Council has established an Electric Vehicle Experience Centre to provide advice on ULEVs and enable test drives and short term loans of such vehicles. Along with Dundee City Council, Milton Keynes has also opened up its council run car parking free of charge to ULEV drivers.

46. Working with car manufacturers OLEV also runs a comprehensive ULEV marketing and awareness campaign – Go Ultra Low. This includes national and regional advertising and events and online tools to support consumers wishing to find out more about ULEVs. See: [www.goultralow.com/](http://www.goultralow.com/)

47. Guidance for local authorities was published in June 2015 available from the Low Carbon Vehicle Partnership on ‘Local Measures to encourage the uptake of low emission vehicles’. This includes a number of case studies. Similar guidance is expected in the summer on supporting the uptake of ULEV taxis.
48. Local authorities will be able to include measures to encourage the uptake of electric vehicles in their bids for the Clean Air Fund where this meets the funds objective to support individuals and businesses affected by local nitrogen dioxide plans. However in cases where proposals include measures that could be funded through other government grants (e.g. electric vehicle chargepoint infrastructure) applications for the Clean Air Fund will have to demonstrate why this intervention should be funded through the Clean Air Fund rather than through alternative funding routes.

Question 4: Please provide evidence on how the measures to support individuals to switch to other forms of transport could be designed to meet the assessment criteria. In particular, responses could include suggestions on:

How the ideas above could be designed to support those most in need such as low income households or small businesses

How the options could be geographically targeted at people most affected by local air quality interventions

What else local authorities or industry could do to encourage people to change their mode of transport, including measures such as communication campaigns.

Summary of responses

49. Responses to the consultation were supportive of measures that support affordable and accessible public transport as well as measures that support cycling and walking.

50. Key themes identified included:

- Improving public transport infrastructure and services and make it more affordable including; funding bus priority measures to make the bus more reliable such as signal priority, preferential access to city centre or bus lanes; measures to increase the attractiveness of bus travel such as contactless ticketing, improved routes or indoor bus stops; increasing bus services; discounted fares or pre-loaded smart cards to certain individuals (e.g. low income) or at certain times; smart travel planning measures; or support for park and ride facilities.

- Improving cycling and walking: for example, investment to improve cycling and walking infrastructure, facilities and services; promote cycle to work
schemes; active travel campaigns e.g. walk to school campaigns; bike/e-bike hire schemes; cycle training schemes.

- Supporting car clubs and car sharing; responses suggested increasing car club availability including at employment, leisure and retail facilities and in less well covered areas; membership discounts for certain groups for example small businesses; encourage local councils to free up parking for car clubs; public awareness campaigns; and a coordinated approach to rollout of car clubs e.g. by developing a procurement framework. One respondent flagged that typically car clubs are less attractive to low income households due to their location and requirements to qualify for membership.

- Information campaigns to encourage behavioural shift: for example providing real time information on public transport e.g. buses; sustainable travel promotional campaigns; cross mode travel planning tools e.g. journey planning websites; multi modal travel ticketing.

- Employee led schemes: including workplace transport plans; cycle to work schemes; and salary sacrifice schemes for alternative travel.

**Government response**

51. Local authorities will be able to bid for funding from the Clean Air Fund for the wide range of measures set out above, providing evidence on how the measure will meet the assessment criteria. We expect these measures will be particularly relevant where there is a clear disproportionate effect on individuals e.g. if the local plans impact low income households, residents or commuters, they could be provided with travel discounts or improved local public transport options.

52. The increased provision of car sharing or car-pooling in areas with NO\textsubscript{2} problems provides a particular opportunity as it could allow people to drive into towns and cities at relatively little cost using clean vehicles. It could also be an opportunity that local authorities could consider through their Clean Air Fund bids, for example local authorities could work with employers to develop schemes to incentivise works to share vehicles for their commute to work. With this in mind government proposes to work with interested stakeholders and local authorities to share information and best practice on car sharing and car-pooling and identify barriers to the wider roll-out.
Question 5: We welcome views from stakeholders on how local authorities could use exemptions to support individuals and businesses affected by a charging Clean Air Zone taking into account the assessment criteria set out in this document and working within the terms of the Clean Air Zone Framework.

Summary of responses

53. In responses received to this consultation stakeholder views as to how exemptions and discounts could be used to support individuals and businesses affected by a charging Clean Air Zone were broad but nonetheless fell into general themes. Overall, there was a view that exemptions should be kept to a minimum.

54. The majority of respondents felt that because each area is different there is a need for local flexibility. However, one respondent did comment that exemptions should be applied nationally. Furthermore, local authorities did note that maintenance of any locally held exemptions would lead to an increased administrative burden.

Government response

55. The Clean Air Zone framework\(^\text{12}\) sets out the government’s policy on exemptions and discounts within charging Clean Air Zones (see section 3.9 of the framework), detailing a list of mandatory exemptions that apply across all potential charging Clean Air Zones to ensure national consistency. In addition, the framework recognises that based on particular local circumstances local authorities may also consider additional exemptions or discounts. Such additional exemptions can only be considered where they do not slow down the achievement of compliance with legal limits. In addition, vehicles which meet at least the minimum emission standard for the Clean Air Zone will be able to enter or move within the zone free of charge. Fully electric or hydrogen fuel cell ULEVs will be able to enter or move within zones free of charge.

56. The following sections set out in more detail the kind of exemptions responses to the consultation called for and the government’s position on these as already set out in the Clean Air Zone framework.

Specialist, military and emergency vehicles

57. There was strong support from a wide range of stakeholders for exemptions for both emergency and specialist vehicles. The Clean Air Zone Framework outlined that certain types of specialist vehicles and military vehicles would be exempt from

paying a charge to enter a Clean Air Zone and that local authorities should assess the nature of any specialist vehicle(s) concerned and provide for an exemption on a case by case, or by type, basis.

58. For emergency vehicles, there was strong support for exemptions. Emergency services use a range of specialist and/or novel or adapted vehicles which are often very costly to replace. We therefore continue to be of the view that local authorities should liaise closely with the emergency services to understand the type of vehicles in their fleets. Indeed, local authorities may choose to exempt emergency service fleets more generally though it is recommended that local authorities aim to reach voluntary agreements with emergency services to ensure vehicles are used in line with the standards in the framework as far as practicable, particularly in the case of non-emergency work.

59. There was some support for historic vehicle exemptions. This is in line with the Clean Air Zone Framework which outlined that vehicles with an 'historic' vehicle tax class would be exempt from paying a charge to enter a Clean Air Zone.

Blue Badge Holders

60. There was strong support for exemptions for blue badge holders and individuals with long term health conditions. As outlined in the Clean Air Zone Framework, vehicles within the disabled passenger vehicle tax class will be exempt from paying a charge in a Clean Air Zone. In addition, local authorities may choose to provide a discount or exemption to holders of a Blue Badge (or to individuals with long term health conditions) whether driving a vehicle, or as a passenger, should analysis of local circumstances warrant such an approach.

Residents

61. There was some support for exemptions or discounts with sunset periods for local residents living in or near to a class D charging Clean Air Zone. Clearly, local residents who reside within the zone will be impacted as they will not have the choice of avoiding a zone when in a vehicle.

62. For this reason, we understand that some local authorities may want to consider allowing residents who live within a class D charging Clean Air Zone additional time to comply with vehicle restriction requirements. However, determination of any discount or sunset period should take into account the level of behavioural change that is needed in order to deliver compliance and must ensure that achievement of outcomes of each zone are not slowed down. Discounts may be set at a local authority’s discretion at up to 100% of a charge. The period for which any discount is available (a sunset period) should also be considered. Local authorities may also wish to consider whether a discount for residents in designated areas adjacent to a zone should also be provided.
Businesses

63. There was some support for a discount (with sunset period) for businesses working or located within a charging Clean Air Zone, particularly for small and medium sized businesses. It was suggested that such exemptions or discounts could be linked to the provision of a clear plan towards compliance. Although the case for exemptions or discounts for small businesses was made, it was also noted that the group is so large that it is difficult to see how such exemptions would not lead to additional time to compliance.

64. Local authorities may consider ways in which the charge could be reduced for groups they identify as facing particular challenges. This could be based, for example, on the location of such businesses in reference to the zone. However, any local exemptions or discounts must ensure that the benefits of the zone are maximised and that achievement of outcomes of each zone are not slowed down.

Other categories

65. Finally, there was some very limited supported for other discounts and exemptions. For example, for social workers, for breakdown recovery vehicles, for public buses, for ‘out of hours’ entry to the zone and for charity vehicles. There was relatively limited support for exemptions or discounts for taxis or private hire vehicles, though it was suggested that licensing could be used to improve taxi and private hire vehicle standards.

66. Based on local authority assessments of local circumstances, local authorities are permitted to apply discounts or exemptions to support people impacted by a charging Clean Air Zone, to make paying the charge more affordable for the target group. This is likely to lead to lower levels of behavioural change and therefore some air quality improvements will be sacrificed. Each local authority will need to assess if they have scope to allow such exemptions without risking failure to achieve compliance with the legal limits in the shortest possible time.
Question 6: Please provide evidence on whether a targeted scrappage scheme could be designed to meet the assessment criteria. In particular, responses could include evidence on:

How to target vehicles affected by local air quality measures geographically so as to:

- Minimise the extent to which there are arbitrary winners and losers
- Minimise overly complex implementation requirements
- How to direct support to low income households or small businesses most in need of support
- The impact a scheme could have on the car and van market
- Suggestions on how to maximise value for money for the taxpayer
- Suggestions on how a scheme could be delivered to minimise fraud, including how a scheme could be designed working with the second hand market

Summary of responses

67. Stakeholder responses were mixed in regards to scrappage with some stakeholders supporting it as a way to assist people to upgrade their vehicle, and with other stakeholders highlighting a range of challenges including poor value for money and difficulties with delivery.

68. Where stakeholders were supportive of scrappage, key themes raised included:

- Eligible vehicle: responses set out a range of vehicles that could be eligible under a targeted scrappage scheme including older diesel cars, taxis, light goods vehicles, buses, coaches, minibuses and HGVs. Other suggestions included targeting high mileage vehicles or offering a ‘2 for 1’ approach where you trade in 2 non-compliant vehicles to try and reduce the number of vehicles on the road.

- Scappage reward: The majority of responses to this question were supportive of scrappage schemes that incentivised a switch to another mode of transport (e.g. mobility vouchers providing discounts off public transport, car clubs and bike hire) or an upgrade to an electric vehicle. There was little to no support for schemes that replaced a vehicle with a new or second hand petrol or diesel vehicle.

- Geographic targeting: responses acknowledged that it would be difficult to define which vehicles should be eligible with suggestions including use of ANPR or ensuring the vehicle is linked to a registered address within a charging zone. Some responses noted that setting eligible postcodes would
risk not helping those travelling in from further afield (e.g. commuters) and not capturing a large number of vehicles that cause the pollution.

- Who should be eligible: responses supported schemes that target low income, charities, those with long term health conditions or small businesses.

- Some stakeholders suggested that we should consider schemes that don’t require scrappage as a pre-requisite e.g. incentive schemes to upgrade your vehicle without any restrictions on your old vehicle or where the old vehicle can be reused or recycled outside of high polluting zones.

69. A number of stakeholders identified challenges with scrappage including flagging:

- That any scheme would be high cost and poor value for money – a number of stakeholders suggested that any funding would be more effectively spent on schemes to help people upgrade their vehicles e.g. plug in grants and schemes to support public transport. A number of responses suggested any such scheme should be funded or part funded by manufacturers. One respondent set out that manufacturer led schemes are more cost effective.

- Difficulties in designing a scheme that would help those most in need e.g. low income, provide value for money and not be open to abuse and fraud. One stakeholder commented this might be reduced if a scheme focused on commercial vehicles.

- Difficulties in targeting vehicles that are regularly entering a Clean Air Zone – potential for unfairness in the design of the scheme or an overly complex scheme. A couple of reports have demonstrated that often the most polluting vehicles are located outside of high polluting areas so geographic targeting would not be effective in reducing emissions;

- Environmental issues with scrapping vehicles that are still in good use and could impact CO2 emissions e.g. if encouraging people to switch from diesel to second hand petrol.

- Potential to disrupt the car market.

- Scrappage just replaces vehicles with more vehicles – focus should be on promoting alternative travel. In addition stakeholders noted that previous schemes have shown that scrappage usually just brings forward scrapping of vehicles that otherwise would not be scrapped for some years.

- That there were concerns over whether it was suitable to deliver a targeted scrappage scheme locally with responses setting out that it could lead to a patchy, inconsistent approach and could be administratively burdensome.
Government response

70. The responses to the consultation have not provided additional evidence that a scheme could be designed that would meet the assessment criteria, in particular that is value for money and deliverable. A number of detailed responses set out that a targeted scheme would be difficult to deliver, potentially open to abuse and could disrupt the existing car market.

71. In response to these concerns we are not proposing to take forward a national scrappage scheme at this time. However we have not restricted the types of measures local authorities could bid for funding for from the Clean Air Fund. Any measure proposed by local authorities would be assessed against the assessment criteria and so would need to demonstrate the rationale for intervention, that they provide value for money, are deliverable and are able to effectively target those most impacted, and have no negative air quality benefit.

72. We continue to welcome manufacturer led scrappage schemes as a way to help some owners of older vehicles to purchase a cleaner vehicle and will continue to work with manufacturers to encourage these schemes to be available to support people to upgrade their vehicle.
Annex A: List of responses from organisations

Archic
Arriva
Autogas Ltd
Bath & North East Somerset Council
Birmingham City Council
Bristol City Council
British Lung Foundation
Broadland District Council
Builder Merchants Federation
BVRLA
Cadent Gas Limited
Campaign for Better Transport
Canal and River Trust
CarTakeBack.com Ltd's
CEMEX
Client Earth
Confederation of Passenger Transport
Copart UK
Coventry City Council
Cyclewirks
Dearman
Eminox
Energy Savings Trust
Enterprise Holdings
Environmental Protection UK
Fair Air Limited
Federation of British Historic Vehicle Clubs Ltd
Federation of Small Businesses
Freight Transport Association
Friends of the Earth
Global Action Plan
Gloucestershire County Council, Strategic Planning
Greater London Authority
JouleVert Limited
Leeds City Council
LEVC formerly known as the London Taxi Company
LGA
Liverpool City Region Combined Authority
London Borough of Havering
London Borough of Southwark
National Association of Boat Owners
National Express
National Franchised Dealers Association
National Motorcycle Dealers Associations (NDMA)
North East Combined Authority
Middlesbrough Council
Mums for Lungs
Natural Gas Vehicle Network
Nissan
Oxford City Council
Port of London Authority
RAC Foundation
RAC Motoring Services
Road Haulage Association
Roads4U Ltd
Rotherham Metropolitan Borough Council
Sheffield City Council
SMMT
Surrey County Council
Sustrans
Tesla
Transport for West Midlands
Urban Transport Group
UK Health Forum
UKLPG
UK Petroleum Industry Association
Vehicle Recyclers Association
Volvo Group
West of England Combined Authority
Worcestershire County Council
WWF