



CLEARING THE AIR

SUPPORTING SMALL BUSINESSES IN TACKLING AIR QUALITY IN ENGLAND

Published: November 2017

 @fsb_policy

fsb.org.uk

fsb⁰⁸
Experts in Business

ACKNOWLEDGMENTS

This report was authored by Andrew Poole, Senior Policy Advisor for Energy and Environment, with support from Allen Creedy, David Tucker and Sue Terpilowski, FSB members and Chairs of FSB's Energy and Environment Policy Unit, Transport Policy Unit, and London Policy Unit, respectively.

Special thanks to FSB's media, public affairs and policy teams in Westminster and across the UK, in particular: Will Black, Senior Policy Advisor for Transport & Infrastructure; Jessica Smith, Public Affairs Advisor; David Moore-Crouch, Media and Communications Advisor; Denise Beedell, Development Manager for Greater London; and Matt Jaffa, Senior Development Manager.

The report was designed by Cactus Design Limited – a small business based in Wales.

ABOUT FSB

The Federation of Small Businesses (FSB) is the UK's leading business organisation. Established over 40 years ago to help our members succeed in business, we are a non-profit making and non-party political organisation that's led by our members, for our members. Our mission is to help smaller businesses achieve their ambitions. As experts in business, we offer our members a wide range of vital business services, including advice, financial expertise, support and a powerful voice in Government. FSB is also the UK's leading business campaigner, focused on delivering change which supports smaller businesses to grow and succeed. Our lobbying arm starts with the work of our team in Westminster which focuses on UK and English policy issues. Further to this, our expert teams in Glasgow, Cardiff and Belfast work with governments, elected members and decision-makers in Scotland, Wales and Northern Ireland.

CONTENTS

Foreword 4

Executive summary. 5

The air quality challenge. 7

The broader context 8

The view from Government 9

Understanding clean air zones (CAZs). 11

Clean air zones and their impact on small businesses 13

Mitigating the impact on small businesses 17

A closer look at London 18

Recommendations 19

FOREWORD

There is no doubt that, in some areas of the UK, the poor quality of the air we breathe is harmful to our health. Air pollution has been linked to 40,000 early deaths a year in the UK and, in many areas, the UK is currently in breach of EU law.

Improving our air quality, particularly in urban areas, is a complex issue and requires the joint action of Government and local authorities. One of the most significant challenges is the build-up of nitrogen dioxide (NO²) concentrations around some local roads, often due to heavy and slow-moving traffic in urban areas. FSB recognises the damaging contribution made by diesel engines and the growing calls for the more damaging vehicles to be removed from UK roads. Although this may play a role in reducing NO² levels, it will also hit many smaller businesses that rely on these vehicles to survive.

It is vital that Government policies – and subsequent local authority action plans – to tackle air pollution must be fair and transparent, allowing those affected to adapt to, and take advantage of, any new requirements. Policies, such as the introduction of Clean Air Zones (CAZs) in England, have the potential to hit up to 1.5 million small businesses and self-employed. Many of these businesses invested in diesel vehicles in good faith after being given assurances and guidance by multiple Governments.

Small businesses are ready and willing to play their part in tackling local air pollution. However, there are numerous challenges they face in achieving this. These challenges may be very different to those who use their vehicles simply for domestic purposes. Similarly, the support small businesses require will vary, depending on the nature of those businesses and the alternatives available. Government strategies – including the Industrial Strategy and Clean Growth Strategy – must enable and empower the UK's 5.5 million small businesses to be part of the solution as we move towards a cleaner and increasingly low-carbon future.

This report is designed to help Government and local authorities to understand the diverse small business audience as they explore further policies on tackling air pollution. Engagement with the small business community is key to empowering this sector as much as possible, while managing the cost burden associated with any required changes to the way small businesses operate. Government proposals must be implemented fairly and transparently, allowing those affected to adapt to, and take advantage of, any new requirements.



Allen Creedy
FSB Energy and Environment Chair



David Tucker
FSB Transport Chair

EXECUTIVE SUMMARY

The introduction of Clean Air Zones (CAZs) in England could potentially affect up to 1.5 million small businesses and self-employed¹, many of which have invested in diesel vehicles in good faith on the back of assurances and guidance issued by multiple Governments. CAZs and other air quality policies will create restrictions and additional costs for businesses operating within their boundaries. While small businesses clearly have an important responsibility and role to play in reducing air pollution, the pathways to achieving this must be affordable, achievable and proportionate.

The UK Government has identified 29 local authorities that potentially require a CAZ. These local authorities represent around 17 million residents and approximately 1.5 million small businesses (790,720 businesses and 1,385,000 self-employed²). So the impact of these air quality proposals will be potentially significant and widespread for UK small businesses.

In urban areas, small business activities contribute significantly to local air pollution. As such, they will play an important role in its remediation.

In exploring solutions to air pollution, Government must seek to fully understand the difficulties that many small businesses will have transitioning to diesel-alternatives. Important small business trades and services must not be deterred from entering city centres.

Small businesses are a diverse and complex audience. Compared to larger companies, their operating margins are smaller, they operate and make investment decisions on much shorter timescales, and they have less available capital. For many, the vehicles they use – and on which they rely – play an integral and integrated part of their business activities.

FSB wants to see a proportionate approach to CAZs with local authorities engaging closely with small and micro businesses on their local air quality proposals.

The UK Government has not directly mandated charging CAZs (i.e. those that enforce a charge for certain vehicles to enter a designated zone). However, it has expressed the view that CAZs that include charging provide the benchmark for achieving statutory NO₂ limit values in towns and cities in the shortest possible time. So for areas currently breaching their air quality limits, a charging CAZ is the Government's presumed best option, unless local authorities can gather evidence to suggest otherwise.

Despite the widespread concern about this issue, it is important to note that air quality is improving, largely as a result of the gradual replacement of older vehicles, particularly diesels. In fact, by 2022, only 10 local authorities in England are forecast to still be in breach of air quality limits, even without the addition of new remedies. So for those local authorities forecast to have achieved their pollution targets in this timeframe, some may question the cost/benefit of a CAZ, particularly given the Government's view that CAZs will take three years to implement.

By the time the majority of CAZs are introduced in 2021, Government has suggested that 2.3 million non-compliant cars and 1 million non-compliant vans will be affected. Government analysis suggests that the cost of upgrading non-compliant light goods vehicles (LGVs) to meet CAZ exemption criteria remains prohibitively high.

For this reason, FSB urges Government to extend the diesel scrappage scheme to cover all small businesses based in, or frequently operating within, the forthcoming CAZs. For those that cannot take advantage of such a scheme, Government should explore alternative solutions and provide additional time to transition away from their older vehicles.

In this context, air quality proposals must sit as part of a holistic approach to reducing harmful emissions across the UK, acknowledging other sources and planning strategically. Government must incentivise distribution network operators (DNOs) to invest heavily in energy infrastructure while reviewing the effectiveness of subsidies and other incentives related to low carbon technologies.

¹ See Annex 1

² Not mutually exclusive

Proposals for further restrictions on vehicles entering urban areas are particularly challenging in London, which already has one of the highest fare charging systems in Europe. In the next few years, those operating a vehicle in Greater London will face a number of charge points around the city, including the Congestion Charge, (Ultra) Low Emission Zone and multiple tunnel and crossing charges.

These charges come at a time when many businesses are facing a variety of challenging cost burdens related to auto-enrolment pensions, National Minimum and London Living Wage increases, disproportionate increases in commercial property costs, and business rates rises.

FSB recognises that many reasonable proposals to tackle air pollution, particularly the introduction of CAZs in some areas, will create additional costs for those living and working in affected areas. These costs must be shared out equitably and fairly and minimised as much as reasonably and practicably possible. Further, the benefits of such measures must be targeted at those who bear their costs.

Cash surpluses raised from charging CAZs should be ring-fenced for local road improvement and air quality initiatives. Government should also ensure there is a single, business vehicle registration system for all charging schemes across the UK.

THE AIR QUALITY CHALLENGE

Air pollution is not a new problem for the UK and, over many years, various pieces of legislation and regulation – both domestic and European – have combined to improve our air quality. However, further progress is required.

Despite improvements, the Government considers poor air quality to be the largest environmental risk to public health in the UK. Government figures for 2012 suggest that poor air quality costs the UK economy up to £2.7 billion a year through its impact on productivity. Furthermore, a 2010 report by Ricardo-AEA (on behalf of Defra) suggested that particulate air pollution reduces average life expectancy in the UK by around six months per person, an economic impact of £16bn per year.³

More recently, a report by the Royal College of Physicians in 2016 suggested that:⁴

'...health problems resulting from exposure to air pollution also have a high cost to society and business, our health services, and people who suffer from illness and premature death. In the UK, these costs add up to more than £20 billion every year.'

The most immediate air quality challenge in the UK is the build-up of nitrogen dioxide (NO₂) concentrations around some local roads, often due to heavy and slow-moving traffic in urban areas. In addition to the obvious health impacts of this, the UK is also in breach of EU law in this regard.⁵ So, 'doing nothing' is not a viable policy option.

Diesel vehicles are responsible for the vast majority (92%) of this 'roadside increment', with diesel cars (35%), diesel vans (22%), HGVs (18%) and buses (16%) all contributing. By the end of 2015, there were 11.4 million diesel cars on UK roads, accounting for 48 per cent of all new registrations. There were also 3.6 million diesel vans on the road in 2015, accounting for 96 per cent of all new registrations in that year.⁶

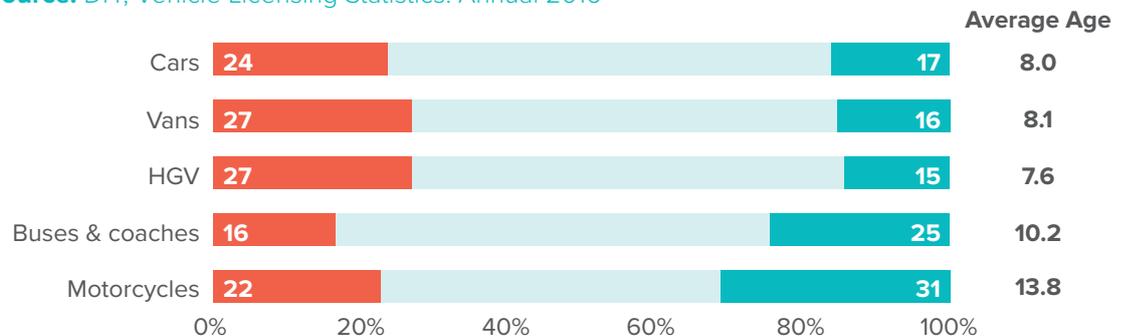
UK air quality continues to improve and, at current rates, many local air pollution issues are expected to be resolved within the next five years, even with no further action (Annex 2). However, as it stands, the predicted rate of air quality improvement is simply too slow to meet legal and health requirements.

A big factor in this improvement is the expected decline in the number of older, more polluting vehicles as they are gradually replaced with newer models with much lower emissions. For example, any vehicle sold in the EU since September 2014 must adhere to the Euro 6 standard (0.06g/km NO_x for petrol engines or 0.08g/km NO_x for diesels).⁷ The Euro 6 standard cut the legal level of diesel NO_x emissions by almost 90 per cent, compared to the Euro 3 standard (0.50g/km NO_x) introduced in 2000.

In this context, it is worth noting that the average car or van on UK roads is 8 years old (Figure 1), with new vehicles accounting for around ten per cent of all registrations per year.⁸

Figure 1: Licensed vehicles by age: GB, 2016

Source: DfT, Vehicle Licensing Statistics: Annual 2016⁹



3 Ricardo-AEA, 'Valuing the impacts of air quality on productivity', 2014

4 Royal College of Physicians, Every breath we take: the lifelong impact of air pollution, 2016

5 40 µg/m³ is the statutory annual mean limit value for NO₂ and cannot be broken. Areas are allowed to exceed 200 µg/m³ (for up to 1 hr) up to 18 times in one year.

6 DfT, 'Vehicle Licensing Statistics: Quarter 4 (Oct – Dec) 2015', 2016

7 RAC website - <https://www.rac.co.uk/drive/advice/know-how/euro-emissions-standards/>

8 DfT, 'Vehicle Licensing Statistics: Annual 2016', 2017

9 DfT, 'Vehicle Licensing Statistics: Annual 2016', 2017

THE BROADER CONTEXT

Unsurprisingly, in the short-term, the UK Government is keen to significantly reduce harmful emissions from vehicles. This also fits with its longer-term aim of reducing vehicle emissions more generally – through a move to electric and other sustainable modes of transport – in order to mitigate the effects of climate change.

Perhaps the most important element of this is the Climate Change Act, domestic legislation which commits the UK to an 80 per cent reduction in CO² emissions by 2050 (compared to 1990 levels). In order to achieve this, the UK must make significant progress across three key areas:

- Energy generation
- Heat
- Transport

In the case of transport, the UK Government recently announced a ban on all new diesel and petrol cars and vans from 2040, following in the footsteps of countries including France, Norway and Netherlands. It is likely that other countries will follow suit in due course.

However, it is clear that this target is currently a long way from reality in the UK, with a large number of structural, social, legal and policy challenges to overcome.

The UK Government's Industrial Strategy Green Paper identifies ten key pillars for growth, including affordable energy, research and innovation, and infrastructure.¹⁰ In advance of this, as part of the 2016 budget, the Chancellor of the Exchequer announced a new Industrial Strategy Challenge Fund to support the development of innovative technologies, such as electric vehicle batteries, citing a desire to transform the economy and see the UK become a world leader in this field.

In urban areas, small business activities contribute significantly to local air pollution. As such, they will play an important role in its remediation. However, as Government makes its policy and investment decisions, it must seek to understand the relationships that many small businesses have with their vehicles – and on the transport and energy networks in general. These relationships may be very different to those of domestic households and larger industry.

Small businesses are a diverse and complex audience. Compared to larger companies, their margins are smaller, they operate and make investment decisions on much shorter timescales, and they have less available capital. For many, the vehicles they use – and on which they rely – play an integral and integrated part of their business activities. Apart from the day-to-day role of transporting people, goods and services, these vehicles – including cars, vans, taxis, lorries and coaches – also represent a long-term investment and a source of capital for smaller firms, something they rely on for future vehicle purchases.

Whatever air quality policy solutions are pursued by Government, they must be fair to those operating outside, as well as inside, areas of pollution. For example, rural businesses would be unduly impacted if Government introduced an additional, across-the-board tax on diesel oil.

It is in this context that policy proposals for tackling air quality must be formed and implemented.

¹⁰ HM Government, 'Building our Industrial Strategy: Green Paper', 2017

THE VIEW FROM GOVERNMENT

The Government's view on air quality is that:

*'...local authorities know their areas best and are best placed to take the lead in rectifying the problem.'*¹¹

Local authorities are required to submit an Annual Status Report (ASR) each year to update Government on their progress in achieving reductions in emissions.

Local authorities are already required, under responsibilities set out in the 1995 Environment Act¹², to review and assess local air quality. They must designate an Air Quality Management Area (AQMA) where statutory limits¹³ are being exceeded. Local authorities must then identify remedial measures as part of an action plan.

In this regard, Government has expressed the view that any local authority action plan:

*'...must not be done in a way that unfairly penalises ordinary working families who bought diesels in good faith as a direct result of tax changes made by previous governments that focused on fuel economy and CO² emissions.'*¹⁴

Presumably this view extends to ordinary working small businesses, with Government also committing to:

*'...work with local authorities and others to consider how to help minimise the impact of such measures on local businesses, residents and those travelling into towns and cities to work where such action is necessary,'*¹⁵

'...issue a further consultation in autumn to aid development and assessment of options'.

Seventy-five local authorities across England, Scotland and Wales contain areas that currently breach acceptable NO² emissions limits.¹⁶ Measures already put in place – at a local, national and EU level – mean that, by 2021, only 27 local authorities in England are forecast to remain in breach (Figure 2). By 2022, this figure drops to 10. And by 2024, this figure reduces to just two (Greater London and Birmingham), again even without further remediation.

¹¹ Defra/DfT, 'UK plan for tackling roadside nitrogen dioxide concentrations (detailed plan)', 2017 – p11

¹² Section 82, Part IV of the Environment Act 1995 or the Environment (Northern Ireland) Order 2002

¹³ Set in accordance with the statutory Local Air Quality Management (LAQM) guidance, updated 2016

¹⁴ Defra/DfT, 'Tackling Nitrogen in our towns and cities: A consultation', 2017 – p11

¹⁵ Defra/DfT, 'Tackling Nitrogen in our towns and cities: A consultation', 2017 – p11

¹⁶ EU 2008 Ambient Air Quality Directive (2008/50/EC) sets statutory annual mean limit of 40 µg/m³ NO₂. Areas are allowed to exceed 200 µg/m³ (for up to 1 hr) up to 18 times in one year.

Figure 2: Local authorities in England forecast to still be in breach of statutory NO₂ limits by 2021 (and so required to undertake local action plans)

Source: UK plan for tackling roadside nitrogen dioxide concentrations, 2017¹⁷

Basildon District Council	Bath & North East Somerset Council	Birmingham City Council
Bolton Metropolitan Borough Council	Bristol City Council	Bury Metropolitan Borough Council
Coventry City Council	Derby City Council	Fareham Borough Council
Gateshead Metropolitan Borough Council	Greater London Authority	Guildford Borough Council
Leeds City Council	Manchester City Council	Middlesbrough Borough Council
New Forest District Council	Newcastle City Council	North Tyneside City Council
Nottingham City Council	Rochford District Council	Rotherham Metropolitan Borough Council
Rushmoor Borough Council	Sheffield City Council	Southampton City Council
Stockport Metropolitan Borough Council	Surrey Heath District Council	Tameside Metropolitan Borough Council

Halton Borough Council¹⁸

Trafford Metropolitan Council and Salford Metropolitan Council¹⁹

In defining which local authorities are required to produce an action plan for reducing NO₂, Government has identified the 27 that are forecast to still be in breach of statutory levels in the year 2021 (see footnote 18 regarding Halton Borough Council). To that list they have also added both Trafford and Salford Metropolitan Councils (see footnote 19). These 29 local authorities are expected to set out their initial action plans by March 2018, and their final plans by the end of December 2018.

It is worth noting that these 29 local authorities contain around 17 million residents and approximately 1.5 million small businesses (790,720 businesses and 1,385,000 self-employed²⁰). So the impact of these air quality proposals will be potentially significant and widespread for small businesses in England.

¹⁷ Defra/DfT, 'UK Plan for tackling roadside nitrogen dioxide concentrations (detailed plan)', 2017 – p31

¹⁸ Exceedance will be resolved by Mersey Gateway Bridge. No CAZ required.

¹⁹ Salford and Trafford Metropolitan Borough Councils are not expected to have persistent exceedances, but Government anticipate they would need to be included in a Clean Air Zone.

²⁰ Not mutually exclusive

UNDERSTANDING CLEAN AIR ZONES (CAZs)

To aid the development of air quality action plans, Government has set out a variety of potential remedial measures as part of its statutory Local Air Quality Management (LAQM) guidance for local authorities in England (excluding London). In two-tier authorities, this guidance applies to both district and county councils. In London, where these powers are devolved, the Mayor is responsible for issuing similar guidance to councils within the Greater London Authority.²¹

Alongside this guidance, Government has expressed a clear view to local authorities that Clean Air Zones (CAZs) are:

*'...the quickest, most cost-effective way of meeting NO² limit values on the majority of urban roads.'*²²

According to the Government's Clean Air Zone Framework, a CAZ:

'...defines an area where targeted action is taken to improve air quality and resources are prioritised and coordinated in order to shape the urban environment in a way that delivers improved health benefits and supports economic growth.'

Therefore, the suite of remedial measures that local authorities choose to take forward as part of their action plans will be judged (by Government) against the relative effectiveness of a CAZ.

The six local authorities originally identified in the Government's 2015 draft plan will be expected to implement their CAZs by the start of 2020, with a view to achieving statutory NO² limit values a year later (by the start of 2021). Any new areas, identified as part of the forthcoming local authority action plans, must have CAZs in place by 2021, meeting their statutory NO² limit values, again a year later (by the start of 2022).

In this context, it is worth reiterating that, by 2022, only 10 local authorities in England are forecast to still be in breach of air quality limits, even without the addition of new remedies (Figure 3).

So for those areas forecast to have achieved their pollution targets in this timeframe, some may question the cost/benefit of a CAZ, particularly a charging CAZ. After all, Government expects CAZs to take three years to implement, while expressing the view that local authorities will only be required to develop plans:

'...where evidence suggests measures could be put in place to bring forward achievement of statutory NO² limit values.'

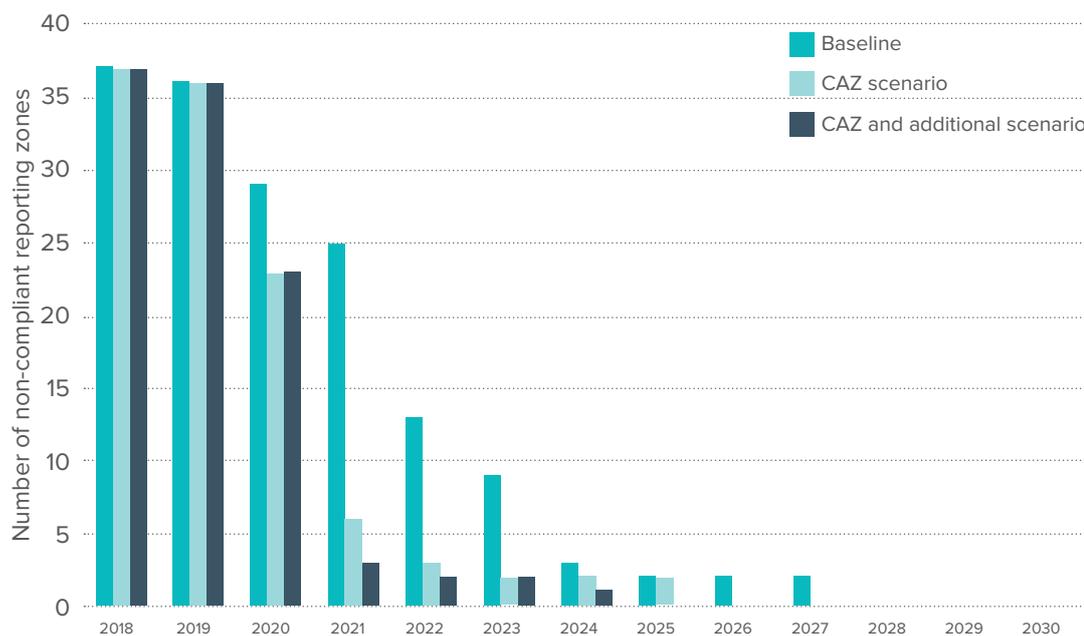
²¹ Defra, 'Local Air Quality Management Guidance (PG16)', 2016

²² Defra/DfT, 'UK Plan for tackling roadside nitrogen dioxide concentrations (technical report)', 2017 – p32

Given the resources required to implement a CAZ, one would imagine that many councils would be keen to explore alternative ways of meeting their emissions targets.

Figure 3: Comparison of the number of reporting zones projected to be non-compliant with no further action (baseline), with the modelled CAZ (CAZ scenario) and with additional abatement (CAZ+ additional actions scenario)²³

Source: UK Plan for tackling roadside nitrogen dioxide concentrations, 2017²⁴



²³ 2022 figure includes 10 English areas, plus Glasgow, Edinburgh and Cardiff

²⁴ Defra/DfT, 'UK Plan for tackling roadside nitrogen dioxide concentrations (technical report)', 2017 – p5

CLEAN AIR ZONES AND THEIR IMPACT ON SMALL BUSINESSES

As part of their action plans, local authorities must decide which type of CAZ – if any – is most appropriate. Local authorities must also decide whether the CAZ they introduce is ‘charging’ or ‘non-charging’. Non-charging CAZs simply identify a range of actions to improve air quality within a defined area, such as facilitating the use of ultra-low emission vehicles (ULEV) and encouraging businesses to clean up their vehicle fleets.²⁵ Charging CAZs include a charge on any vehicles entering a defined area which fail to meet a required standard or criteria.

In May 2017, the Government published its Clean Air Zone Framework, setting out the expected local authority approach to their operation and implementation in England. The Framework identifies four types of CAZ, representing incremental increases in scope (i.e. types of vehicle covered) and overall impact:

Class A - Buses, coaches, taxis and private hire vehicles (PHVs)

Class B - Buses, coaches, taxis, PHVs and heavy goods vehicles (HGVs)

Class C - Buses, coaches, taxis, PHVs, HGVs and light goods vehicles (LGVs)

Class D - Buses, coaches, taxis, PHVs, HGVs LGVs and cars

It is important to note that Government has not directly mandated ‘charging’ CAZs anywhere, either in the six areas originally identified in the draft Air Quality Plan, or any other areas subsequently identified.

However, Government’s view is that:

‘...CAZs that include charging... provide the benchmark for achieving statutory NO² limit values in towns and cities in the shortest possible time.’²⁶

‘...for the purpose of modelling the Plan, all of the modelled CAZs have been assumed to be charging CAZs, given that the Plan requires relevant local authorities in England to implement a plan which will achieve compliance in the shortest possible time.’²⁷

So for such areas, a charging CAZ is the Government’s presumed best option, unless local authorities can gather evidence to suggest otherwise. However, Government caveats its guidance to local authorities by also acknowledging:²⁸

‘...charging CAZs would only be expected where equally effective non-charging approaches are not identified.’

‘...given the potential impacts on individuals and businesses, when considering between equally effective alternatives to deliver compliance... if a local authority can identify measures other than charging zones that are at least as effective at reducing NO² and are at the same or lower cost, those measures should be preferred as long as the local authority can demonstrate that this will deliver compliance as quickly as a charging CAZ. The local modelling undertaken by local authorities will help to identify what other measures could be taken.’

So, as part of their action plan design – especially when considering the relative benefits of a charging CAZ – local authorities must assess any ‘unintended consequences’ for small businesses.

²⁵ Defra/DfT, ‘Clean Air Zone Framework’, 2017 – p20

²⁶ Defra/DfT, ‘UK Plan for tackling roadside nitrogen dioxide concentrations (technical report)’, 2017 – p30

²⁷ Defra/DfT, ‘UK Plan for tackling roadside nitrogen dioxide concentrations (technical report)’, 2017 – p33

²⁸ Defra/DfT, ‘Tackling Nitrogen in our towns and cities: A consultation’, 2017 – p10

Research by FSB in 2015 asked small businesses to think about the means of transport used to access their business, by themselves, their employees, customers or suppliers (Figure 4). 93 per cent of respondents said cars were important to their business and 64 per cent said vans were important.

Figure 4: The importance of different vehicles to small businesses

Source: FSB Survey (2015)

Vehicle	“Important” (%)	“Very important” (%)	NET Important (%)
Car	22	71	93
Van	24	40	64
Lorry	21	29	49
Bus	22	10	32
Train	23	10	33
Walking	25	14	39
Cycling	16	5	22
Other	10	7	17

Many small businesses rely on cars and other vehicles, including HGVs, for deliveries into and out of their premises, as well as for transporting themselves. In terms of impact, then, CAZ Class C and, in particular, CAZ Class D (see above) would have the biggest impact on this group.

Government analysis of the financial impact of CAZs suggests that businesses would face ‘*additional costs*’, as well as ‘*changes to customer behaviour*’. However, they expect the impact on small businesses to be limited, based on experience of the role out of the London Congestion Zone, which suggested ‘*...a broadly neutral impact on the business economy of central London*’.²⁹

Government expect businesses to adapt to the introduction of charging CAZs in the following ways:

²⁹ Transport for London, ‘Central London Congestion Charging Impacts Monitoring Fourth Annual Report’, 2006

A) Compliance/upgrading

By 2021, Government believes that ‘...2.3 million non-compliant cars and 1 million non-compliant vans would be affected by CAZs’.

In advance of the potential introduction of charging CAZs, Government research suggests around a quarter (25%) of businesses that own non-compliant light goods vehicles (LGVs) will simply upgrade to more modern vehicles which are exempt from the charge (Figure 5). However, this figure appears to broadly represent the level of natural vehicle turnover one might expect during that time.

Figure 5: Proportion of non-compliant vehicle owners which choose certain behavioural response

Source: UK Plan for tackling roadside nitrogen dioxide concentrations, 2017³⁰

RESPONSE	CARS (%)	LGVs (%)	HGVs (%)
Upgrade	22	25	44
Cancel	16	12	14
Change mode	23	4	0
Avoid	23	17	14
Pay	16	42	28

So it is clear that, at the moment, most businesses that own non-compliant LGVs are not currently thinking of upgrading their vehicles, at least not specifically to meet CAZ exemption criteria. Figure 6 suggests that the cost of doing so remains prohibitively high. However, the degree to which a charge for a non-compliant LGVs affects the timing of a decision to upgrade their vehicle (i.e. whether such a decision is brought forward) is unclear and will depend on the exact nature of the business in question.

Figure 6: Mean sale and purchase prices by vehicle type for 2020 (2017 prices)

Source: UK Plan for tackling roadside nitrogen dioxide concentrations, 2017³¹

	CARS	LGVs
Average sell value	£3100	£3500
Average buy value	£5000	£10,000
Difference	-£1900	-£6500

Long-term, Government is determined to push vehicle owners towards ultra-low emission vehicles (ULEVs), believing that ‘...widespread use of ULEVs will lead to radically improved air quality throughout the UK, as older, more emitting vehicles are replaced with cleaner electric vehicles’. However, in 2016, ULEVs only accounted for 1.5 per cent of all UK vehicles, so there is some way to go before adoption of ULEVs starts to have a significant impact. In the meantime, it is more reasonable to assume businesses will move towards less polluting diesel and petrol vehicles (e.g. Euro 6).

30 Defra/DfT, ‘UK Plan for tackling roadside nitrogen dioxide concentrations (technical report)’, 2017 – p114

31 Defra/DfT, ‘UK Plan for tackling roadside nitrogen dioxide concentrations (technical report)’, 2017 – p100

B) Avoidance

Government suggests that some drivers '*...may be able to alter their mode of transport away from vehicles. For example they may choose to take the bus or train to work, transport goods by train as opposed to via HGV or walk to the shops*'. However, businesses that depend on LGVs have, by their nature, little scope for changing their mode of transport.

According to Government research, around a sixth (17%) of LGV owners plan to avoid CAZ charges, either by cancelling journeys, reducing the number of journeys into these zones, or diverting their journeys around the zones. Many of these decisions will depend on the exact circumstances and nature of the business in question.

C) Absorbing costs

Compared to domestic households, small businesses are more restricted in moving to alternative forms of transport. Government research suggests that around two fifths (42%) of businesses that own non-compliant LGVs will simply pay the charge for driving into a CAZ (Figure 5, above). Only 4 per cent of LGV owners and 0 per cent of HGV owners would consider changing mode.

MITIGATING THE IMPACT ON SMALL BUSINESSES

Government's CAZ framework allows for discounts and exemptions for certain vehicles entering charging zones, and other mechanisms that reduce costs '*...for groups they identify as facing particular challenges*'. In this context, the Government has highlighted '*...those in the lowest income who own the oldest (pre Euro 4) petrol and diesel cars or pre Euro 6 diesel vans*'.

At a more strategic level, the Government's UK Air Quality Plan identifies a number of areas where the cost of charging CAZs can be reduced by:³²

- Minimising the number of people affected (e.g. reducing the scope and size of a CAZ),
- Enhancing the alternatives available (e.g. public transport networks, cycle routes, car clubs etc.),
- Encouraging switching to cleaner alternatives (e.g. through improved infrastructure like electric charging points).

Are scrappage schemes the answer?

Scrappage schemes have been widely talked about by Government, politicians and the media as a potential mechanism for expediting the removal of older, more polluting vehicles from the UK's roads.

FSB welcomes recent announcements by many car manufacturers of scrappage schemes designed to reduce the number of older diesels – including commercial vehicles – on Britain's roads. Some small businesses may seek to take advantage of these deals and purchase new vehicles sooner than they had originally planned.

However, FSB does not believe these schemes alone will bring about the required emissions reductions in the timescales set out by Government. For a start, these schemes only target vehicles registered before 2010, i.e. those using Euro 4 or earlier diesel engines.

Building on the good faith shown by the car manufacturing industry, Government should extend a diesel scrappage scheme to cover all small businesses based, or frequently operating within, the forthcoming CAZs.

³² Defra/DfT, 'UK Plan for tackling roadside nitrogen dioxide concentrations (technical report)', 2017 – p101

A CLOSER LOOK AT LONDON

Government has recognised London's air quality problem as '...the most challenging in the country'. However, powers to tackle air quality (at least in terms of local policy and regulation) are largely devolved to the London Mayor. As such, FSB London has been working closely with the London Mayor and the Greater London Authority on this issue, with a particular focus on the Mayor's London Plan and the development of the Mayor's Transport Strategy.

London is naturally well placed to implement a CAZ. The London Congestion Zone (LCZ) has been in place since 2003, and extended in 2007. In addition, the London Low Emission Zone (LEZ) was introduced in 2008, reaching its current level of requirements by 2012. And in October 2017, a new Emissions Surcharge ('T-Charge'), aimed at discouraging older (pre-Euro 4) polluting vehicles, was enforced across central London. In addition to all of these existing initiatives, the Mayor of London is currently consulting on plans to introduce an extensive Ultra-Low Emission Zone (ULEZ) in 2019 – which would eventually cover most of central London – followed by a Zero Emission Zone in 2025.

However, London now has one of the highest fare charging systems in Europe. In the next few years, those operating a vehicle in Greater London will face a number of charge points around the city:

- Congestion Charge
- Low Emission Zone
- Ultra-Low Emission Zone (ULEZ)
- Increased Business Parking Permits
- Blackwall Tunnel - TBC
- Silvertown Tunnel - TBC
- Dartford Crossing charge

These charges come at a time when many businesses are facing a variety of challenging cost burdens related to auto-enrolment pensions, National Minimum and London Living Wage increases, disproportional increases in commercial property costs, and business rates rises.

When exploring further potential air quality solutions, therefore, the Mayor of London and UK Government must ensure that important small business trades and services are not being deterred, with policies that recognise the difference between essential and non-essential journeys.

FSB London has publically called for 'root-and-branch reform' of the entire Congestion Charge scheme – including tunnel charging – to ensure a dynamic, demand-based charging system that can support the competitiveness of businesses. Without fundamental reform, FSB London has expressed major concerns about the introduction of further regulatory and pricing incentives in London to influence the transition to ultra-low emission vehicles (ULEVs). On this basis, FSB London opposed the Mayor's recent decision to bring forward the launch of a ULEZ scheme to 2019, arguing that it does not allow sufficient time for businesses to make changes to their fleets without significant cost hardship.

As part of a wider process of reform, FSB London has called for a range of measures to reduce the financial burden on small businesses, including:

- A requirement on the boroughs to ensure full and proper consultation is undertaken with the small business community and produce micro and small business impact assessments as part of their plans.
- A single, pan-London registration and exemption system for business vehicles for all charging schemes.
- A feasibility study to assess whether a new and improved road charging system could be more sophisticated and better reflect journey and emission patterns.
- A Congestion Charge discount for 'essential business vehicles' set at the same rate as residents.
- The appointment of a Freight and Logistics Commissioner for London to show how important this issue is to the competitiveness of London's economy.
- Investment in electric vehicle charging points.
- A diesel scrappage scheme for smaller businesses.

RECOMMENDATIONS

Government should:

- 1) Seek to fully understand the difficulties many small businesses will have transitioning to diesel-alternatives. Small businesses are a diverse and complex audience. Compared to larger companies, their margins are smaller, they operate and make investment decisions on much shorter timescales, and they have less available capital. For many, the vehicles they use – and on which they rely – play an integral and integrated part in their business activities.
- 2) Require local authorities to demonstrate they have engaged with small and micro businesses before signing off their action plans. To date, levels of engagement have been poor.
- 3) Take a proportionate approach to enforcing Clean Air Zones. By 2022, only 10 local authorities in England are forecast to still be in breach of air quality limits, even without the addition of new abatement remedies. Areas like Bolton, Bristol, Bury, Coventry, Manchester and Newcastle & Gateshead (all of which are forecast to have met their targets by this time) should be given support and every opportunity to avoid the need for Clean Air Zones.
- 4) Ensure that important small business trades and services are not being deterred from city centres. New policies and requirements must recognise the difference between essential and non-essential journeys.
- 5) Extend a diesel scrappage scheme to cover all small businesses based, or frequently operating within, the forthcoming Clean Air Zones. FSB welcomes recent announcements by many car manufacturers of scrappage schemes designed to reduce the number of older diesels – including commercial vehicles. However, Government is unlikely to meet its emissions reduction targets without strategically and holistically addressing the broader stock of diesels currently operating in areas of poor air quality. Government should build on the good faith shown by the car manufacturing industry and extend a diesel scrappage scheme to cover all small businesses.
- 6) Support, not punish, those that cannot take advantage of a scrappage scheme, providing additional time to transition away from their older vehicles. When exploring further potential air quality solutions, UK Government must ensure that important small business trades and services are not being deterred, with policies that recognise the difference between essential and non-essential journeys.
- 7) Prioritise support for the development and roll-out of low-carbon light goods vehicles. FSB welcomes the commitment by manufacturers to the development and sale of hybrid and electric vans, but the initial costs and real-world ranges of these new vehicles are unclear. Government should explore how these vehicles may be incentivised. The success of these vehicles will also depend heavily on the underlying infrastructure on which they rely.
- 8) Ensure that all cash surpluses raised from charging Clean Air Zones are ring-fenced for local road improvement and air quality initiatives, including the provision of additional support for those that are most affected by, and least able to adapt to, the transition to low emission vehicles. Clean Air Zones should pay for themselves. The costs associated with setting up and running CAZs should not be passed on through general taxation to those who receive none of the benefits, e.g. those in rural areas.
- 9) Ensure there is a single, business vehicle registration system for all charging and exemption schemes across the UK. Many businesses may travel between different charging zones on a single day, meaning their costs could rise quickly. A single, pan-city charging and exemption mechanisms is particularly important in London, where businesses potentially face a number of charge points as they go about their daily activities, including the Congestion Charge, low emission zones, and crossing and tunnel charges.
- 10) Take a holistic approach to reducing harmful emissions across the UK, acknowledging other sources and planning strategically. FSB welcomes the recent publication of the Clean Growth Strategy, setting out the Government's ambitions across a number of different sectors, including low-carbon transport and energy generation. However, within this plan, there remains a great deal of uncertainty about the speed and direction of development for many technologies. This uncertainty must be addressed as soon as possible to provide investor confidence.

- 11) **Formally review the effectiveness of subsidies and other incentives related to low carbon technologies.** As part of this, Government should examine the approach to taxing vehicles and mileage so that the system is future proof, takes account of a rapidly changing vehicle technology, and provides confidence to those wishing to invest.
- 12) **Incentivise distribution network operators (DNOs) to invest heavily in energy infrastructure and capacity upgrades across the forthcoming Clean Air Zones.** Without this we cannot hope to roll out the volume of charging stations required to underpin a transition to electric vehicles in these areas. Government should urgently publish its strategy for the roll-out and financing of charging stations across the country.
- 13) **Incentivise the introduction of improved, smart traffic management systems in Clean Air Zones,** reducing congestion and speeding up traffic movement.

Local authorities should:

- 1) **Ensure that small businesses are fully engaged and accounted for as part of the development process for air quality action plans.** Businesses must be given fair opportunity to input and comment on local proposals.
- 2) **Ensure that all profits from charging Clean Air Zones are ring-fenced for local road improvement and air quality initiatives,** including those that encourage small businesses to change their mode of transport and promote increased use of public transport, walking and cycling.
- 3) **Report on the progress of Clean Air Zones annually.** This should include an ongoing assessment of where and how small businesses are being impacted.

ANNEX 1:

Number of businesses and self-employed in areas identified as potentially requiring Clean Air Zones in England³³

LA	Population	Businesses	Self-employed
Basildon DC	183400	7390	11500
Bath NES	187800	8210	17400
Birmingham CC	1124600	37115	68100
Bolton MBC	283100	9110	19500
Bristol CC	454200	18060	34400
Bury MBC	188700	7980	13700
Coventry CC	352900	10065	19000
Derby CC	256200	7365	11600
Fareham BC	115400	4460	7000
Gateshead MBC	201600	5085	9500
GLA	8787600	505655	881600
Guildford BC	148000	7440	12500
Leeds CC	781700	28225	46900
Manchester CC	541300	22490	30100
Middlesbrough BC	140400	3205	6000
New Forest DC	179200	7065	16400
Newcastle CC	296500	7925	15100
North Tyneside CC	203300	5060	11900
Nottingham CC	325300	8890	17000
Rochford DC	85700	3605	*
Rotherham MBC	261900	7230	14600
Rushmoor BC	96300	3370	*
Salford MC	248700	8740	12900
Sheffield CC	575400	15905	31800
Southampton CC	254300	6710	15700
Stockport MBC	290600	11665	20500
Surrey Heath DC	88400	4710	6300
Tameside MBC	223200	6165	14200
Trafford MC	234700	11825	19800
TOTAL	17,110,400	790,720	1,385,000

³³ Office for National Statistics, Nomis official labour party statistics - <https://www.nomisweb.co.uk/>

ANNEX 2:

Number of LAs in England that will remain in breach of air quality targets, by year (based on no additional action)

Year	Number of LAs in England still in breach
2018	63
2019	53
2020	40
2021*	28
2022	10
2023	7
2024	2
2025	1
2026	1
2027	1
2030	1

* Deadline for most CAZs

© Federation of Small Businesses

fsb.org.uk

 [federationofsmallbusinesses](https://www.facebook.com/federationofsmallbusinesses)

 [@fsb_policy](https://twitter.com/fsb_policy)

If you require this document in an alternative format please email:

accessability@fsb.org.uk

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior permission of FSB. While every effort has been made to ensure the accuracy of the facts and data contained in this publication, no responsibility can be accepted by FSB for errors or omissions or their consequences. Articles that appear in the report are written in general terms only. They are not intended to be a comprehensive statement of the issues raised and should not be relied upon for any specific purposes. Readers should seek appropriate professional advice regarding the application to their specific circumstances of the issues raised in any article.

This report can be downloaded from FSB website at www.fsb.org.uk


Experts in Business