

Frequently asked questions about Clean Air Zones

1. Why do we need Clean Air Zones (CAZ) that restrict the dirtiest vehicles from entering?

Road vehicles are the biggest source of air pollution at roadside locations. Diesels are the big problem and cars in particular - that's why we need to restrict traffic.

There are various serious health impacts associated with air pollution – triggering strokes and heart attacks, worsening cardio-vascular and respiratory disease including asthma, causing lung cancer, association with changes linked to dementia, and effects during pregnancy, it is estimated to [cost the economy and NHS £20 billion per year](#).

The most effective CAZ restrict the most polluting vehicles from entering. This should include cars and all types of good vehicles. Restricting vehicles can utilise number plate recognition cameras and software, as employed in the Low Emission Zone in London. Similar zones exist in other countries, such as Germany, which employ a coloured badge scheme. In a CAZ, vehicles of a lower standard e.g. Euro 6 (diesel) and Euro 4 (petrol) could face a charge or fine if they enter. In some cases the CAZ may only need to operate at certain times when traffic, and therefore pollution, levels are high.

2. What are Clean Air Zones?

Clean Air Zones (CAZ) are areas where targeted action is taken to cut air pollution. They are necessary because many UK towns and cities in the UK have illegal levels of harmful Nitrogen Dioxide (NO₂) pollution. The government expects CAZs to:

- Facilitate low emission vehicle take up
- Include awareness raising and data sharing initiatives
- Involve local councils (and their contractors) displaying leadership in vehicle procurement
- Improve local emission standards for taxis, buses and private hire vehicles
- Support healthy active travel by cycle and walking

In addition, ‘charging’ CAZs restrict the most polluting vehicles by requiring motorists to pay a charge.

Further reading: Air quality: clean air zone framework for England
<https://www.gov.uk/government/publications/air-quality-clean-air-zone-framework-for-england>

3. Can’t we tackle the air quality problem without charging motorists?

The government’s [own analysis](#)¹ in its Air Quality Plans clearly shows that ‘charging Clean Air Zones are the most effective tool for cutting harmful emissions as soon as possible.

Any action to tackle the menace of air pollution “by the soonest possible date” (as required by the [High Court](#)) must by definition include the most effective measure available – ‘charging Clean Air Zones’ in relevant places. Rather than local councils having to first assess whether other measures could instead be as effective as a CAZ, as the government is asking them to do, they should implement other suitable measures as well as a CAZ.

4. Where and when are CAZs being introduced?

Greater London will have a Ultra Low Emission Zone (like a CAZ) and there are 5 charging CAZs already planned for Birmingham, Derby, Leeds, Nottingham and Southampton.

The government is asking a further 23 local councils in England to produce Local Action Plans where they can consider a CAZ. However Friends of the Earth thinks these should all be required to implement CAZs and that there should also be CAZs in a further 24 places in England (as these places would also still have illegal air in 2019 without further action). We think CAZs should be in place by the end of 2018, not 2020 as the government plan. There are also many more local councils with an Air Quality Management Area (AQMA) for NO₂ which also need to take immediate action.

Devolved Administrations are considered separately.

¹ Technical Report p30 and p150

5. Won't CAZs just displace traffic (and therefore pollution) on to surrounding roads as drivers try to avoid the charge?

This is possible and CAZs must be well designed in order to avoid it. Sophisticated computer modelling of traffic flows is used by central government to assess the likely impact of a number of CAZ options developed by councils. The government and local council will want to be confident that the final CAZ chosen will meet EU pollution limits across the town / city in question. However pollution may be increased on some roads.

Friends of the Earth's view is that CAZs should be as large as possible and be just a part of action to make our towns and cities healthier, less congested places to live and work. Large CAZs make sense because:

- They will mitigate against 'displacement'
- They will help reduce particulate matter pollution (for which there are no safe limits) across a whole area
- They will reduce NO₂ pollution across a whole area - not just reduce it where relevant for legal requirement but also where pollution is over objective levels / AQMAs for NO₂
- They will help make our towns and cities more liveable, pleasant places

6. Won't CAZs just penalise less well-off communities?

Air quality is an environmental justice and a health inequalities issue. Deprived communities are, in general more likely to be subject to the worst air pollution, whilst having the lowest levels of car ownership. The introduction of measures to clean up our air, including CAZs will, therefore, disproportionately benefit the health of more deprived communities and particularly young children in those communities.

[Analysis for the governments Air Quality Plan](#)² found that the CAZs modelled had a larger proportion of more deprived Social Economic groups living inside than outside but "air quality also tends to be poorest in areas of high deprivation, both within and outside the modelled CAZs". Furthermore: "..., the evidence base... suggests that actions aimed at reducing the highest concentrations of NO₂ have the potential to narrow the gap and disproportionately benefit more deprived and ethnically diverse groups by reducing the extent of inequalities." And "the introduction of CAZs therefore has the potential to improve air quality for some of the most deprived areas of the UK and for some of those that risk the greatest exposure."

Other [research by the University of Leeds](#)³ found that exposure of young children, who are more susceptible to the health impacts, of deprived communities to air pollution has increased over the last decade. Furthermore there are very significant

² Technical Report p92 –p97

³ An Environmental Justice Analysis Of Exposure To Traffic-related Pollutants In England And Wales p439-440

environmental justice issues at play as “those areas in the UK with lower car ownership/access are those that are exposed to the greatest concentrations of pollution, and conversely those with highest ownership/access are exposed to the lowest concentrations.”

Air pollution is also an [inequality issue](#) – it hits the most vulnerable people hardest, with exposure to air pollution damaging children’s lung development, and exacerbating existing respiratory and cardiovascular conditions which are particularly an issue for elderly people. Black and ethnic minority communities suffer disproportionately, as do the most deprived in our society as they [tend to live near main roads where air pollution is worst](#). In London it has been found that [four-fifths of schools in areas breaching EU limits for NO₂ are in deprived areas](#).

7. How can we be sure CAZs won’t penalise the less well-off who have to drive for work?

The most recent Euro 6 (diesel) and Euro 4 (petrol) standards apply to vehicles registered after August 2015 and January 2006 respectively, and therefore diesels not subject to CAZ restrictions are more likely to be owned by drivers in higher socio-economic groups. All else being equal this could mean that CAZs will impact disproportionately on lower income drivers who are more likely to own older vehicles. It is vital therefore that where CAZs are introduced, complimentary measures are put in place to ensure that the mobility of less well-off communities is not compromised.

- Exemptions or discounts for residents or other specific groups, perhaps with a [‘grace period’ to allow time for travel habits to adapt](#)⁴
- A well targeted government scrappage scheme should be introduced that is accessible to vehicle owners from disadvantaged communities (unlike current schemes which only assist towards the cost of a brand new vehicle). Such a scheme could be limited to one year duration as a transitional arrangement, have a proof of 1 year ownership requirement and should be targeted at replacing the most polluting vehicles – pre Euro 6 diesels. Any scrappage scheme should be funded at least in part by manufacturers whose vehicle emissions under real-world driving conditions have been, for several years, many times the levels measured in official tests.
- A scrappage scheme should not be limited to vehicle replacement and should offer the following options, perhaps through a ‘voucher’ system, which could be matched by employer or retailer contributions:
 - Help towards replacement cleaner vehicles, including 2nd hand pre Euro 6 diesel vehicles with 2nd hand petrol vehicles (petrol vehicles of

⁴ CAZ Framework p26

all Euro standards emit only a fraction of equivalent diesel vehicles in ‘real world’ conditions)⁵

- Car club membership (which generally rent newer, cleaner vehicles)
- Public transport season tickets
- Electric / conventional cycle purchase

8. Won’t it be incredibly confusing for drivers if different towns and cities implement different types of CAZ?

Yes it would be. This ought to be avoided because all CAZs are approved and funded centrally by a special government air quality unit which has developed a [CAZ framework](#), by which CAZs should operate and which should ensure harmonised planning, coordination and integration of all the Zones.

9. Introducing a CAZ is going to be expensive, how will cash strapped councils afford it?

Councils are short of cash but money for the CAZs comes from a [£255million DEFRA implementation fund](#)⁶. Councils can bid for money to pay for infrastructure like automatic number plate recognition cameras and also money for communications like road signs and public information campaigns. In any case, not tackling air pollution costs the UK economy £20B a year

10. Don’t we also need to also improve the alternatives for driving?

Yes – absolutely. We need fewer cars not just newer cars, particularly as even electric vehicles generate significant harmful particulate matter particles from tyre and brake wear and contribute to congestion. Clean Air Zones and forms of ‘diesel ban’ are an effective approach to cutting diesel emissions, (especially NO₂) air pollution, but they should be considered as part of a wider strategy to make our towns and cities healthier and more liveable. A number of cities have had good results through pursuing a less explicitly diesel-focused transport policy, which looks to a broader sustainable ‘Avoid, Shift, Improve’ strategy.

Making walking and cycling easy and attractive are key to this approach. A city with [21% of all trips by car and 34% by bike \(Freiburg, Germany\) will have cleaner air than a city with 58% of trips by car and 2% by bike \(Manchester\)](#)

⁵ Technical report p11, i.e Euro 3 diesel vehicles (from year 2000) emit 5 times the NO₂ of Euro 3 petrol in ‘real world’ conditions

⁶ Para 100

[Research](#) reveals a car modal share of 75% (Swindon), 63% (Milton Keynes), 57% (York), and 56% (Leeds). London is exceptional in the UK with a car share of 39%, but still much higher than Vienna or Berlin. The city of Vienna has reduced the car share of trips from [40% to 27% in the period 1993-2014](#) through the adoption of “a co-ordinated package of mutually reinforcing transport and land use policies that have made car use slower, less convenient and more costly, while improving conditions for walking, cycling and public transport”.

11. Air pollution isn't all caused by vehicles, what about industry and wood burning stoves?

Correct, a significant amount of NO₂ and particulate matter comes from other sources. However because air pollution is a highly localised problem, the vast majority of emissions which impact on the health of people where they live and work are from vehicles - hence the focus of our campaign.

The government says “...road transport is responsible for some 80% of NO_x concentrations at roadside, with diesel vehicles the largest source in these local areas of greatest concern.” Just 9% of roadside NO₂ emissions are from “homes industry and commerce” (including wood burning stoves). Local authorities have powers to designate ‘smoke control areas’ under the 1993 ‘clean air act’ to control emissions from stoves. The government plans to publish a wider AQ strategy in 2018.