

Implementation of Clean Air Zones in England

1.0 In the Draft Clean Air Zone Framework, are the right measures set out in Section 2

Yes

Asthma UK wants to see urgent action on tackling air pollution. Air pollution is a major cause of asthma exacerbation and asthma attacks, which are in turn the principal cause of asthma deaths ([Dick.S et.al BMJ 2014](#)). We welcome the measures to reduce the health impacts of air pollution set out in section 2 of the draft framework. However, Asthma UK believes that the framework could deliver the health benefits of cleaner air quicker and more effectively if additional measures were included. This could be achieved without taking away from the other two aims of the framework.

Additional measures are necessary because air pollution is a serious public health issue that requires urgent action. Air pollution is linked to long term health problems such as decreased lung function and cardiovascular disease ([Z. Chen et.al Journal of Thoracic Diseases 7:46–58 2015](#)). The adverse effects of air pollution are far more acute for people with asthma. Pollution aggravates symptoms and causes asthma attacks (Dick.S et.al BMJ 2014). A survey of 1000 people with asthma found that traffic fumes trigger symptoms in two thirds (66%) of people with asthma (Asthma UK 2014). Repeated exacerbations have a very detrimental effect on quality of life, 42% of those surveyed stated that traffic fumes discourage them from walking or shopping in congested areas (Ibid).

2.0 Are there additional measures that should be highlighted under each theme? Please give evidence of impact if possible.

There are additional measures that should be highlighted under the “immediate action to improve air quality and health” theme.

Section 2.2 does not include a timescale for the implementation of the Clean Air Zones. Section 1.9 states that one of the three main aims of the framework is “immediate action to improve air quality and health”. An appropriate timescale should be included in the framework in order to ensure implementation is timely and to give both local authorities and road users greater clarity. [Southampton](#), Nottingham and Birmingham City Councils have stated that they would be able to implement CAZs by 2018. This is a reasonable timescale. The sooner CAZs are implemented the sooner the health benefits will be felt.

Furthermore, section 2.2 does not provide any detail on the size and scope of the CAZs. More detail would give local authorities and road users greater clarity. It will also help road users prepare for the implementation of CAZs.

Section 2.5 should ensure local authorities monitor air pollution levels in their local area. This will allow local authorities to keep track of any changes in air pollution levels. This would serve a dual role. First, it would allow local authorities to monitor the progress of the CAZ to ensure that it delivers cleaner air as soon as possible. Second, local authorities would be able to alert residents when air pollution levels in their area were high. They could do this through pre-existing social media channels. This measure would allow people with asthma to prepare accordingly and avoid exacerbations and asthma attacks. Air pollution levels across the country are already monitored by

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Defra and many local authorities do this already. As a result, both these recommendations would be a cheap way of improving public health and ensuring the CAZs are having an effect.

Section 2.5.1 refers to “sites with particular emissions problems” such as bus depots. Defra should clarify what areas with “emissions problems” are. They should not just mean heavily congested areas. The definition should also include sites where there are concentrations of vulnerable people. Research by Policy Exchange found that 25% of London School children attended school in areas where air pollution levels are above legal limits ([Up in the Air: Policy Exchange 2015](#)). Air pollution is particularly damaging for developing lungs ([RCP Every Breath We Take 2016](#)). As a result, the framework should encourage local authorities to focus on areas with high levels of air pollution and/or vulnerable people.

3.0 In addition to the draft Framework, are there other positive measures that (a) local or (b) central government could introduce to encourage and support clean air in our cities?

B: Central Government

In the long term, central government should progressively reform vehicle excise duty (VED) to disincentivise diesel vehicles. Diesel vehicles produce the largest quantities of harmful pollutants and are one of the main sources of pollutants in urban areas (WHO Review of evidence on health aspects of air pollution Project 2013). If this is not possible at the national level the government could devolve VED rates to those cities with acute air pollution problems that wish to go further ([IPPR Solving London’s Air Pollution Crisis November 2016](#)).

One of the key aims of the CAZs is to deliver a cleaner fleet of road vehicles. This process could be accelerated by the reintroduction of a national ‘scrappage’ scheme, providing owners of older diesel cars with a cash incentive to scrap their vehicles. This scheme could be implemented on a national level or by individual local authorities.

A similar scheme was implemented 2009/10 for vehicles older than 10 years old. A new scheme could be set up now with a more specific environmental objective of taking older and more polluting diesel cars off the road. Such schemes giving some financial support to car owners who were planning to sell their vehicles anyway, but experience from 2009/10 suggests they are effective in bringing forward sales decisions ([IPPR Lethal and Illegal: London’s Air Pollution Crisis July 2016](#)).

In addition, central government should also consider a vehicle accreditation scheme to ensure that Euro 6 vehicles meets legal limits in real driving conditions.

4.0 Do you agree that the requirements in Clean Air Zones for taxis and for private hire vehicles should be equivalent? Please provide supporting evidence for your views.

Yes:

Both taxis and private hire vehicle produce pollution that is damaging to health. This is especially true if they run off diesel fuel. Therefore, in order for the CAZs to effectively reduce pollution levels requirements should be based entirely on accurate vehicle standards.

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5.0 Do you agree the standards should be updated periodically? Please provide supporting evidence for your views.

Yes

Asthma UK's view is that vehicle standards should be upgraded periodically with a view to dis-incentivising the most polluting vehicles, notably diesel vehicles. Diesel vehicles have been shown to produce the most harmful pollutants in the largest quantities (RCP 2016).

6.0 If yes, do you agree that the minimum vehicle standards set out in the Framework should remain in place until at least 2025? Please provide supporting evidence for your views.

Asthma UK's view is that the minimum vehicle standards should be updated earlier than 2025. The current standards are a positive first step in tackling air pollution. However, for the CAZs to have a meaningful and long term effect on public health, vehicle standards will have to become stricter earlier than 2025.

The need for stricter standards has been highlighted by the ineffectiveness of the London Low Emission Zone (LEZ). Currently, the LEZ does not charge cars for entering. Under the current framework local authorities are also not obligated to include cars in their plans.

A recent study funded by Asthma UK assessed associations between traffic-related air pollutants and respiratory/allergic symptoms amongst 8–9 year-old schoolchildren living within the LEZ. The research showed that traffic-related air pollutants are having adverse effects on respiratory/allergic symptoms in schoolchildren in London. ([H. Wood et al PLoS ONE. 2015; 10\(8\):e0109121](#)). The same study also highlighted that stronger action is needed to help reduce exposure to these pollutants, as London's LEZ as implemented in its first three years so far has had no beneficial effect on the symptoms of the schoolchildren assessed.

As highlighted by the study there was no evidence of a reduction of either nitrogen oxide or nitrogen dioxide in urban background or roadside locations assessed. Nitrogen dioxide is a harmful pollutant that exacerbates asthma symptoms. A meta-analysis of the effect of traffic generated air pollution and asthma in children, which included 19 studies, concluded that increased exposure to nitrogen dioxide is associated with new-onset asthma ([Gasana et.al Environmental Research 2012](#)).

The case of the LEZ shows that for CAZs to have a meaningful effect on air quality and health they will eventually have to include diesel cars. At this time, this may not be possible given the economic importance of diesel vehicles. However, waiting until 2025 will make it very difficult for the CAZs to achieve immediate improvement of both air quality and health, one of the three main set out in page 2 of the framework.

Furthermore, the current European Emission standards have been shown to be unrepresentative of real road conditions. As a result, cars that meet Euro 6 standards and are not charged under any CAZ within this framework are likely to produce considerably more pollution than previously thought ([International Council of Clean Transportation 2015. Real-world exhaust emissions from](#)

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[modern diesel cars a meta-analysis of PEMS emissions data from EU \(euro 6\) and us \(tier 2 bin 5/ulev ii\) diesel passenger cars](#)). To take into account these changes and consequently reduce the health impact of air pollution vehicle standards should be updated earlier than 2025.

7.0 Is the approach set out in Section 3.9 suitable to ensure charges are set at an appropriate level?

No

The approach set out in section 3.9 is vague. It only sets out the factors that local authorities should consider in setting the charge. It lacks guidance as to how which factors are more important and on the process for setting a charge. For the approach to be suitable, more detail is required.

8.0 Do you have any comments on the secondary legislation as drafted?

Part 3 (1) of the secondary legislation restricts the number of CAZs to five: Birmingham City Council, Derby City Council, Leeds City Council, Nottingham City Council and Southampton City Council. This is insufficient. The problem of air pollution is a national one and requires a national response ([Committee on the Medical Effects of Air Pollutants 2010](#)). The Government should expand the scope of the secondary legislation to include more councils. If this does not happen the health effects of air pollution will continue to be a drain on public health and the economy.

9.0 8. Do you agree with the approach to Blue Badge holders?

10.0 Do you agree with the conclusions of the impact assessment? If no, please provide supporting evidence.

11.0 Do you agree with the approach undertaken in the impact assessment? If no, please provide supporting evidence.

12.0 Are you aware of any additional data that could inform the impact assessment? If yes, please give details.

13.0 Are the operational standards and requirements set out in Section 3 of the Framework acceptable? Please provide supporting evidence for your views.

The framework allows local authorities to create CAZs that do not include cars, by creating type A through to C class zones. Clean air zones that do not include cars have been shown to be ineffective

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and are unlikely to improve air quality. London's Low Emission Zone (LEZ), which does not include cars or motorbikes, has so far failed to reduce emissions and improve health outcomes (Kelly 2011). If diesel cars are not included in a CAZ, then it is highly unlikely that it will improve air quality and health.

We acknowledge that including cars in all clean air zones will increase costs for some car owners. However, research by both IPPR and the Royal College of Physicians shows that clean air zones bring about significant economic benefits through improvement to public health (IPPR July 2016 and RCP 2016).