

## **Expert testimony to inform NICE guideline development**

Section A: Developer to complete	
Name:	Natasha Smith
Role:	Policy Adviser
Institution/Organisation (where applicable):	Department for Environment, Food and Rural Affairs
Contact information:	
Guideline title:	Air pollution – outdoor air quality and health
Guideline Committee:	Public Health Advisory Committee E
Subject of expert testimony:	Overview of the proposed Clean Air Zones
Evidence gaps or uncertainties:	



## Section B: Expert to complete

Summary testimony: [Please use the space below to summarise your

testimony in 250–1000 words. Continue over

page if necessary ]

'Improving air quality in the UK', the national air quality plan to achieve compliance with the limit values for nitrogen dioxide was published  $17^{th}$  December 2015. The key aim of the plan is to improve public health along with reducing the impacts of poor air quality on the environment. Evidence shows that 80% of nitrogen oxides (NO<sub>x</sub>) emissions where the UK is exceeding legal limits are related to transport. The plan sets out a blend of targeted and comprehensive action to tackle those emissions, underpinned by accelerating the transition towards a low emission fleet. A key measure within the plan is the introduction of a programme of Clean Air Zones.

The evidence used to inform the development of national measures included existing research on low emission zones, a research project carried out by Ricardo Energy and Environment on behalf of Defra ('Exploring and appraising proposed measures to tackle air quality') and the use of marginal abatement cost curves. Additionally local authorities provided evidence of the measures planned or being carried out at a local level. The technical report published alongside the plan provides details of the air quality and economic assessment methodology along with how the compliance modelling was carried out and the associated sensitivities and uncertainties.

A key finding of the Ricardo research project was that there is a general lack of quantitative evidence post implementation of measures to improve air quality and there are relatively few measures with a significant enough impact to substantially bring forward compliance with the legal limits for nitrogen dioxide. Access restrictions were one such measure. Evidence from the costs curves suggested that transport focussed measures were the most cost effective with abatement from road transport estimated at £25-80,000 per tonne of NO<sub>x</sub> abated.

Clean Air Zones (CAZs) are delineated geographical areas where targeted action on a number of fronts is taken to improve air quality, addressing all pollutants. Resources within the area are prioritised and co-ordinated to deliver health benefits and support growth with a particular focus on those measures that will accelerate the transition to a low carbon, low emission economy. This is key to ensuring improvements are ongoing and sustainable. The introduction of a CAZ supports future development whilst aiming to decouple growth from both air pollution and carbon emissions. Government will publish a framework for Clean Air Zones which has been called for by a number of stakeholders including local authorities and industry who have highlighted the need for a consistent approach.

Within the framework there are three key themes under the concept of a CAZ; i) immediate action to improve air quality and health, ii) support for local growth and ambition, and iii) accelerating the transition to a low emission economy. Types of action that can be taken by local authorities are brigaded within these themes. Under i) for example to reduce local emissions local authorities could use their power to reduce engine idling or encourage healthy travel by working with businesses, communities and schools to encourage the provision of secure facilities for cycle storage. Under iii) for example local authorities could help accelerate uptake of electric vehicles by providing incentives and benefits such as preferential parking or delivery bays for electric vehicles or providing dedicated taxi only city centre charging hubs.

Underpinning this broader action, is the use of access restrictions to encourage only the cleanest vehicles in those areas with the most significant air quality challenges. As set out in the plan there are classes of access restrictions covering different vehicles. In general vehicles such as lorries and buses or high frequency users such as taxis emit more pollution on a per vehicle basis so the approach taken is to tackle these first. The classes are cumulative so that Class A covers buses and taxis, B covers buses, taxis and heavy goods vehicles (HGVs), C introduces light goods vehicles and



so on up to D which covers all vehicles. Under the plan Government is requiring the five cities with the most persistent pollution problems to implement CAZs. Current evidence shows that Birmingham and Leeds will need to implement a Class C, Derby, Nottingham and Southampton will need to implement a Class B. Government is not requiring any of the five cities to implement access restrictions that include private cars or motorcycles.

References to other work or publications to support your testimony' (if applicable):

Improving air quality in the UK -

https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/486636/aq-plan-2015-overview-document.pdf

Technical report -

https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/492901/aq-plan-2015-technical-report.pdf

Expert testimony papers are posted on the NICE website with other sources of evidence when the draft guideline is published. Any content that is academic in confidence should be highlighted and will be removed before publication if the status remains at this point in time.