



# Light Rail (UK) Group

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## Interview: Beverley Nielsen on the role of local authorities in tackling air pollution



Beverley Nielsen, Associate Professor at Birmingham City University and Independent Councillor at Worcestershire County Council, speaks to *Air Quality News* about the role of local authorities in tackling air pollution ahead of hosting the [Northern Air Quality News Conference 2022](#).

*Why is it so important to be discussing air quality in the UK now?*

For me, this is a problem we need to discuss more, partly as it leads to premature deaths – every year, up to 64,000 of all premature deaths are associated with air pollution, with up to 40,000 premature deaths linked to exposure to particulates and nitrogen dioxide.

It's a costly problem too. The Environment Food and Rural Affairs Committee noted in February 2021 that health problems caused by air pollution are costing society around £20bn a year.

Internationally, the World Health Organization (WHO) quotes air pollution as the biggest environmental health risk in the world, with a study cited in the *BMJ* showing that fossil fuel air pollution is responsible for around one in five deaths – more than double the number previously thought. This estimated that 8.7 million people worldwide had died in 2018 as a result of breathing in air containing particles from burning fossil fuels.

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The tragic death of nine year old, Ella Roberta Adoo Kissi-Debrah in 2013 raised the consequences for both children and adults with the Coroner concluding in December 2020 that Ella had ‘died of asthma contributed to by exposure to excessive air pollution’. Medical causes of death were listed as, ‘acute respiratory failure’, ‘severe asthma’ and, for the first time, ‘air pollution exposure’. He stated that during the course of her illness this little girl had been exposed to levels of nitrogen dioxide and particulate matter well in excess of WHO guidelines, with the principal source of her exposure down to traffic emissions.

For me, I’m particularly concerned about air quality and emissions now for these principal reasons:

- Failure to regulate Non-Exhaust Emissions (NEE) with too rigid a focus on tailpipe emissions
- Failure to set clear air quality targets in the 2021 Environment Act
- Concerns over the powers and remit of the new Office for Environmental Protection

And of course, I very much agree with the recommendations in a report by MPs on the Environment, Food and Rural Affairs Committee published in February 2021, which also highlighted the need to urgently address health inequalities with further research into the links between poor air quality and Covid-19, along with addressing poor air quality around schools.

In light of all this, it seems there’s a pressing need to roll out more Clean Air Zone options to deliver better air quality in urban areas driving integrated transport solutions.



## ***What role do local authorities play in tackling air pollution?***

To improve air quality local authorities have been setting up Clean Air Zones (CAZ). There are various types of CAZ – charging and non-charging — and four classes – A, B, C and D, with each class covering a different variation of potentially polluting vehicles including buses, coaches, private hire vehicles, HGVs and LGVs. ‘D’ is the only class to include cars and each local authority is able to decide for itself what level of restrictions to apply.

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A number of cities have recently introduced these – some as required by government.

In Worcester, the city closest to where I live, we have an Air Quality Management Area in place. Green City Councillors brought forward a Notice of Motion to deliver more investment in air quality monitors across the city, but this was blocked. In one built up area of the city in a narrow street that gets very congested at peak times, restrictions have been put in place banning cars between 3.30pm and 6.30pm.

In a bid to trigger further action, Green Councillors are calling for real-time monitoring of air quality through the day so motorists and residents can see actual levels of pollution across the city. But crucially this approach does not deliver any revenue stream empowering cities to take further steps to ameliorate the impact of poor air quality – active mobility corridors, more Demand Responsive Transport, Community Transport, car shares, bikes, scooters and further greening of our urban environment.

The Green Alliance report on the Case for Clean Air Zones highlights the modelled and real impacts in our cities. For example, Birmingham's impact assessment found that the health and environmental benefits for 2020 alone equating to over £50m. Modelling work by Bristol in 2019 demonstrated the financial benefits of a CAZ D as being five times greater than those of a CAZ C. London's ULEZ achieved the following in its first ten months:

- 37% per cent reduction in NO<sub>2</sub> concentrations at central London roadsides
- 35% reduction in NO<sub>x</sub> emissions from road transport in the central zone
- 6% fall in CO<sub>2</sub> emissions from road transport in the central zone
- 3 to 9% fall in traffic flows in central London
- 49% reduction in non-compliant, more polluting vehicles, equivalent to 17,400 vehicles, detected in the zone.

Given the pressure on government to improve air quality, other towns and cities are anticipated to introduce further variations on clean air zones to suit their circumstances. Clean Air Zones may well be a means to stimulate integrated transport hubs, such as those seen in European cities and providing greater choice in terms of mass transit options for residents, linking alternative modes together in providing ease of transport interchange and as a means of facilitating a real alternative to the car, responsible for almost 70% of total greenhouse emissions.

## **Why are events like the [Northern Air Quality News Conference](#) so important?**

Events like the Northern Air Quality News Conference are important in bringing together world-leading expert speakers able to consider current policy priorities, their impact and whether the regulatory framework in place is sufficient to protect the public health.

The event on 25th May in Manchester brings together an impressive range of skills and experience from universities, specialist organisations and international representation, including the World Health Organisation (WHO), enabling well-informed, topical and targeted discussion ranging from local place implications, challenges and results of initiatives undertaken, to international comparisons and the global implications of continued air pollution on our populations internationally.

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On a lively and stimulating day with opportunities for question and answer forums, delegates will have the opportunity to quiz panelists and meet with many other like-minded people involved in this field. It's a great chance to learn from other places which are tackling these thorny challenges to deliver cleaner air quality for residents and to relate this to opportunities to improve biodiversity and the wider environment whilst also delivering better quality of life and enhanced well-being for all our residents wherever they live.

***If you are interested in attending the Northern Air Quality News Conference, you can find more information and book your place [here](#).***

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