

DEFRA Air Quality Action Plan 2017- WYCA Consultation Response - Detailed Questions

1. Question - How satisfied are you that the proposed measures set out in this consultation will address the problem of nitrogen dioxide as quickly as possible?

This DEFRA Air Quality Plan consultation response is provided by the West Yorkshire Combined Authority (WYCA). WYCA is the strategic economic body for the Leeds City Region and are the Local Transport Authority for West Yorkshire, acting on behalf of the five West Yorkshire local district authorities of Bradford, Calderdale, Kirklees, Leeds and Wakefield.

The draft DEFRA UK Air Quality Plan for tackling Nitrogen Dioxide has identified the West Yorkshire districts of Leeds, Bradford and Wakefield as local authorities where potential mitigation is required. The West Yorkshire Combined Authority (WYCA) look forward to working with these authorities and government on devolved decision making and funding to address local air quality.

In 2016/17, all West Yorkshires Local Authorities and WYCA adopted a five year West Yorkshire Low Emission Strategy (WYLES) to tackle poor air quality. The Strategy is reflective of the challenges faced by West Yorkshire; 29 Local Air Quality Management Areas, polycentric urban geography, high levels of congestion and challenging topography. It sets out a series of locally determined recommendations to significantly improve air quality in West Yorkshire up to 2021. The Strategy was developed in partnership with a range of local authority, public health and other key stakeholders to deliver a mutually agreed set of actions that will deliver change. WYLES addresses both Nitrogen Dioxide and Particulate Matter from a range of sources, but principally transport.

The Draft Air Quality Plan makes a series of proposals solely on reducing Nitrogen Dioxide and appears to be set in a narrow context of ensuring EU legislative compliance, rather than taking a leading role on broader air quality improvement. Poor air quality is a wider issue than simply Nitrogen Dioxide. In West Yorkshire, 5.1% of all deaths (1 in 20 deaths) are caused by exposure to Particulate air pollution with up to 6% in some local authority areas. (2013). The Transport emission "cost" of Particulate Matter is estimated at £44,430 per tonne compared with £25,252 per tonne for Oxides of Nitrogen (NOx).

Additionally, physical inactivity costs the NHS an estimated £1.06 billion a year in direct costs and in England, the costs of lost productivity from sickness absence and premature death have been estimated at £6.5 billion per year.

Addressing vehicle emissions alone may address the immediate issue of air quality, however these mechanism are unlikely to address wider negative impacts such as congestion and public health. The Air Quality Plan presents a real opportunity to link sustainability, spatial and urban planning, active travel, green infrastructure and investment in sustainable travel to air quality improvement. The government could be clearer on what further investment will be available to enable significant mode shift towards sustainable travel such as public transport, walking and cycling to create the infrastructure for growth. A significant number of short journeys currently undertaken by car could be achieved by walking and cycling. In West Yorkshire 47% of commuter journeys under 2km were made by car, rising to 69% for commuter journeys of 2-5km.

Action on air quality cannot solely be addressed by individual authorities - vehicles move across boundaries and our networks support a range of local and national journeys. Tackling air quality problems effectively requires a joint endeavor between national and local government with national Government providing a clear framework which includes specific plans and strategies for those areas which are clearly the responsibility of national Government (such as the national fiscal and taxation regime for transport) with the city regions given the autonomy and

funding they need to deliver effective local air quality plans in partnership with local authorities. We would like to see the Air Quality Plan and any programmes which emanate from it delivered collaboratively across government departments (OLEV, DEFRA, DFT, BEIS) with a coherent approach. This Plan could also clarify the mechanisms government will use to enable collaborative working with authorities

Joined up central government policies on air quality and the forthcoming Emissions Reduction Plan (BEIS) would enable a holistic approach to tackling both air quality and climate change. This would help ensure the most cost effective and efficient approaches are taken and multiple benefits maximised, with potential conflicting issues or adverse environmental impacts addressed.

There follows a review of the individual mechanisms proposed in the DEFRA Air Quality Plan;

Clean Air Zones

WYCA has committed in its draft Transport Strategy to supporting the implementation of Clean Air Zones (CAZ) where these are felt necessary or are mandated.

The Plan names three West Yorkshire authorities; - Leeds, Bradford and Wakefield, as having modelled exceedances of Nitrogen Dioxide by 2020, however the Plan states the modelling outputs are not yet considered definitive, with an accuracy of +/-30%. Leeds was mandated in DEFRA's initial Air Quality Plan in 2016 to prepare a CAZ and is progressing implementation. This revised Air Quality Plan is ambiguous regarding legislative processes, governance and responsibilities for implementing CAZs and its implications for the authorities of Bradford and Wakefield.

Charging CAZs in principle are likely to lead to targeted reductions in Nitrogen Dioxide where implemented. The Technical Report identifies the significant improvement of charging CAZs over and above other activities.

The Plan does not recognise the threat of displacement of older and more polluting vehicles to non CAZ authorities/areas, and possible re-routing of journeys to avoid CAZs which could lead to further air quality problems. The Plan needs to be clear on the nationwide mechanisms to be made available to remove the threat of displacement. This will be primarily achieved by retrofit technology and vehicle scrappage schemes that need to be accessible to a wider array of vehicles than simply private cars.

The implementation of charging CAZs may lead to unfair competitive economic conditions between authorities with and without CAZs. This has a potential to create economic challenges for towns and cities in a time of economic instability.

Government should also consider the potential for road users to switch to equally polluting vehicles which are exempt from CAZ restrictions.

To ensure the implementation of CAZs (where required) have as minimal negative effect as possible, marketing and information campaigns need to commence as soon as possible in affected areas. Fleet renewal choices are currently being made by our region's businesses that could be negatively impacted by CAZ designation. We therefore need urgent clarity from government on how implementation will be supported logistically and financially at the national and local level.

Non-charging CAZs have not been modelled according to the governments Technical Report,

therefore the success of these measures is unquantified. They should be considered an extension of existing Local Air Quality Management Area declarations, which to date have had limited impact nationally. Local authorities will need clear evidence from government that the additional measures outlined are likely to lead to significant Nitrogen Dioxide improvements.

Tackling air pollution on the English Road network

Significant sections of the Strategic Road Network (SRN) are located in West Yorkshire. Investment is required in improvements to the SRN including the M1, M62 and the A1 to maintain an acceptable level of operation and improve flow. Increased highways efficiency could lead to air quality improvement, however this has to be achieved in collaboration with local authorities as their roads form the start and end of journeys involving the SRN.

Additional Funding to Accelerate Uptake of ULEVs/Hydrogen Vehicles and Infrastructure

WYCA welcomes additional funding measures to rollout the infrastructure required to support mass Ultra-Low Emission Vehicle (ULEV) adoption. It is hoped that the draft Vehicle Technology and Aviation Bill (2017) will receive royal assent post general-election as it proposes several related mechanisms, including conditioning ULEV charging/refuelling infrastructure at key locations and making charge point easier to access and use.

WYCA supports the steps by government to increase investment in alternative fuels, e.g. hydrogen refuelling infrastructure. This proposed activity will also complement the Leeds City Region's ambitions to be the first commercial hydrogen economy in the world. The City Region is already collaborating with the Northern Gas Network, Leeds City Council and Tees Valley LEP to explore NGN's exciting H21 Leeds City Gate project. This focuses on hydrogen based heat decarbonisation in the Leeds City area. There is wide spread political backing for this project and we are excited about its potential to not only contribute significantly to ensuring long term energy affordability, but to our local, and national carbon emission reduction targets and also the potential transformational impacts on the economy in terms of job creation, growth and innovation. By establishing the first commercial hydrogen economy in the world it would place our region on the map, making it the first port of call globally for hydrogen technologies and a region of excellence.

WYCA wish to work in partnership with stakeholders including neighbouring authorities to help facilitate a pan-northern/national hydrogen refuelling network. This involves long term, partnership working (as stated above) that has potential for economies of scale if investment is delivered intelligently. This preferred approach does not lend itself to the current trend for short timescale funding competitions for alternative fuel infrastructure. The government approach is likely to lead to pockets of high quality alternative fuel infrastructure that does not support industry needs for a nationwide accessible network, especially for the freight sector.

Retrofit Technology

There is likely to be a significant gap in capital funding required to ensure all impacted vehicles (especially bus and taxis) are compliant with CAZs. West Yorkshire has seen examples of significant private investment in low emission bus fleet renewal – e.g. First Bus £70m in Leeds as match funding to the DfT's £173m Leeds Transport Investment Programme. However, planned lifecycle replacement alone is not likely to achieve compliance, especially for smaller

	<p>operators.</p> <p>In the short term, emission abatement retro-fit technology is likely to be the preferred solution to ensure 100% compliance and address the real threat of displacement of higher polluting vehicles away from CAZs. The government could take action to ensure sufficient retrofit capital is available to all local authorities to mitigate displacement, achieve compliance, and achieve wider air quality improvement across the UK.</p> <p>A national framework for retrofit accreditation needs to be advanced quickly to provide confidence in the technology and allow operators to plan and deliver upgrade investment.</p>
2.	<p>Question - What do you consider to be the most appropriate way for local authorities in England to determine the arrangements for a Clean Air Zone, and the measures that should apply within it?</p> <p>The Plan's proposed arrangements for CAZs appear to leave national Government with scope to control implementation of local Clean Air Zones. This appears inconsistent with Government's wider stated commitment to devolution on the basis that local areas are best placed to determine the most appropriate response to specific local public policy issues and challenges.</p> <p>The ambiguity/scope for Government control could also hinder the development of effective air quality management strategies as local areas may attempt to second guess what measures the Government would find acceptable. Given the tight timescales for achieving air quality targets this could lead to valuable time being wasted and in air quality plans that are ineffective.</p> <p>Locally accountable authorities are best placed to balance the needs of local business and communities with the need for an effective plan to improve air quality. Devolved funding will enable local authorities to determine and deliver appropriate Clean Air Zone compliance mechanisms.</p> <p>Question - What factors should local authorities consider when assessing impacts on businesses?</p> <ol style="list-style-type: none"> 1. Additional cost to businesses of ensuring compliance through fleet renewal, above and beyond normal vehicle lifecycles 2. Ability for businesses/operators to access grants and loans to ensure compliance 3. Congestion costs of potential re-routing of traffic on alternative routes leading to business delay and potential air quality issues 4. Valuing of wider benefits, e.g. clean air and attractive 'green' spaces to work in (there is a basket of benefits for businesses such as increased wellbeing of staff, increase in productivity, attracting new talent/customers, inward investment).
3.	<p>Question - How can Government best target any funding to support local communities to cut air pollution? What options should the Government consider further, and what criteria should it use to assess them?</p>

Are there other measures which could be implemented at a local level, represent value for money, and that could have a direct and rapid impact on air quality? Examples could include targeted investment in local infrastructure projects.

How can Government best target any funding to mitigate the impact of certain measures to improve air quality, on local businesses, residents and those travelling into towns and cities to work? Examples could include targeted scrappage schemes, for both cars and vans, as well as support for retrofitting initiatives.

How could mitigation schemes be designed in order to maximise value for money, target support where it is most needed, reduce complexity and minimise scope for fraud?

Locally accountable authorities are best placed to create an effective plan to improve air quality. Devolved funding will enable local authorities to determine and deliver appropriate Clean Air Zone compliance mechanisms. Adequate revenue and capital funding is required for local authorities to design and deliver locally appropriate mechanisms.

As stated in our Q1 response, poor air quality does not solely relate to Nitrogen Dioxide. The Air Quality Plan should use this opportunity to address wider air quality impacts including Particulate Matter.

WYCA supports a nationwide scrappage scheme to support individuals and businesses in purchasing cleaner, less polluting vehicles. A scrappage scheme should not be solely restricted to the private car. This presents a wider opportunity for older diesel vehicle replacement across a range of sectors including LGV, HGV, Trains and Buses. However, the scheme needs to be equitable – to ensure all have opportunity to replace older vehicles. Any scrappage scheme to support ULEV uptake needs to ensure an adequate nationwide charge point is in place to ensure success.

Government should consider the threat of displacement of older vehicles to areas without CAZs. To mitigate this, there could be a nationwide programme of retrofit technology available to all operators/local authorities - not simply CAZ conditioned areas - to support nationwide improvements in air quality and remove the risk of creating further poor air quality areas.

Government should commit significant capital to support non-car travel modes such as rail, bus and cycling and walking as key drivers to reducing poor air quality. Many short journeys currently undertaken by car could be transferred to walking and cycling if appropriate and safe infrastructure was in place to enable journeys. Grant funding for Local Transport Plans – to promote and provide for non-car alternative choices - has been cut in recent years to deliver local interventions.

Investment in Rail - WYCA is delivering a series of Park and Rail sites through the £1bn West Yorkshire and York Transport Fund, however without further investment in the railway the success of similar schemes will be limited. Ensuring sufficient rail capacity to meet demand and instil further mode shift away from car will contribute towards a range of economic and environmental benefits.

Investment in cycling and walking - In West Yorkshire the £60m CityConnect programme is creating the infrastructure and training to enable a range of journeys to be undertaken by

	<p>sustainable travel. The DfT's 'Investing in Cycling and Walking; The Economic Case for Action' stated that schemes delivered through the Sustainable Travel Towns projects achieved an average BCR of 4.5:1, which is considered extremely high value for money.</p> <p>Green Infrastructure - The Air Quality Plan should also consider the vital role of Green Infrastructure i.e. tree planting in improving air quality whilst also helping tackle wider environmental issues such as climate change and flood alleviation. Trees have a positive impact on air quality by removing pollutants from air, including sulphur and nitrous Oxide, ozone and Particulate Matter. The Leeds City Region is in the process of updating its Green and Blue Infrastructure Strategy and Delivery Plan to ensure a coordinated approach to Green and Blue issues across the city region.</p>
4.	<p>Question - How best can governments work with local communities to monitor local interventions and evaluate their impact?</p> <p>Local Universities - including the University of Leeds - are world leading institutions on air quality, and have a significant role to play in research, design and monitoring of air quality improvement mechanisms. These institutions are best placed to create effective and value for money monitoring and evaluation programmes.</p>
5.	<p>Question - Which vehicles should be prioritised for government-funded retrofit schemes?</p> <p>We welcome views from stakeholders as to how a future scheme could support new technologies and innovative solutions for other vehicle types, and would welcome evidence from stakeholders on emerging technologies. We currently anticipate that this funding could support modifications to buses, coaches, HGVs, vans and black cabs.</p> <p>The government's draft CAZ Framework document proposes the types of vehicles to be impacted by CAZ minimum standards. For all four categories of CAZ (A-D), buses and taxis are impacted. Any retrofit funding must support these two sectors to adapt and comply with the minimum emission standards. WYCA will support these industries through the CAZ implementation process to ensure vehicles are the cleanest possible across all of West Yorkshire.</p> <p><u>Bus Sector</u></p> <p>Three of the five West Yorkshire authorities are named in the Air Quality Plan for Nitrogen Dioxide exceedances. With a large number of bus services operating between our West Yorkshire urban centres, there is likely to be a requirement for significant investment in our bus fleet to ensure compliance and allow vehicles to operate within the CAZ areas without negative impact on bus operations and our local economies.</p> <p>West Yorkshire bus operators have committed to significant private capital investment in operations to ensure the newest low emission vehicles. However, not all operators will have sufficient capital available to purchase new fleets of low emission buses beyond normal lifecycles. There is likely to be a significant 'gap' of vehicles achieving CAZ compliance by 2020, especially amongst smaller operators.</p> <p>Bus Retrofit is considered the most effective value for money solution to ensuring CAZ compliance. This requires a clear and early statement by government on retrofit accreditation</p>

technology that is compliant with CAZ requirements and reassure operators.

Bus retrofit is a proven technology in West Yorkshire. Through the Clean Vehicle Technology Fund and Clean Bus Technology Fund, WYCA has successfully retrofitted 165 'Yellow Bus' school buses and 32 Access Buses with emission abatement technology.

Government funding for retrofit technology is essential and needs to be available to all authorities to ensure there is no displacement of older vehicles away from CAZs into other areas of the country, resulting in an exacerbation of air quality issues.

Taxis

West Yorkshire has approximately 11,000 taxi and private hire vehicles which are essential to supporting residents and businesses. Wheelchair accessible hackney carriages represent some 1,100 of the fleet. Nearly all are diesel and none of the fleet meet current Euro VI Emission standards.

WYCA was successful in receiving £1.98m from the OLEV's Taxi Scheme to support uptake of electric taxi and private hire operation. It is thought that some 70 hackney vehicles (6% of fleet) and 490 private hire (5% of fleet) will become ULEV by 2020 through the funding. Whilst new electric taxis and private hire models are to be made available, current pricing is likely to lead to limited uptake of these vehicles.

There is likely to be a significant 'gap' of taxis not achieving CAZ compliance by 2020. Devolved funding should be made available both to support the financial gap for purchasing new ULEV taxis/private hire and for retrofit technology in short term to ensure CAZ compliance. A clear retro-fit accreditation scheme and funding programme needs to be established by government as soon as possible to assist the industry.

Other Vehicles

There is wider opportunity to retrofit other vehicles with emission abatement technology. Leeds has commenced a government funded trial to reduce the emissions of refrigeration units on HGVs. Other vehicles such as LGV, Refuse Vehicles and Trains could all be fitted with retrofit technology to improve emissions.

6. Question - What type of environmental and other information should be made available to help consumers choose which cars to buy?

The following information is considered appropriate for consumers to choose vehicles;

- A vehicle labelling scheme should not be simply limited to new vehicles and would provide greater effectiveness if the sale of second hand vehicles were included.
- Simple information on a range of emissions that the vehicle emits (NOX, CO2 etc)
- Estimated operational savings (fuel savings (£), maintenance savings (£), road tax (£))
- Simply payback on the investment (based on the whole operational lifetime)
- Whole lifecycle analysis and the potential operational and maintenance cost savings likely over the lifetime of ULEVs
- Indicative wider economic, social and health benefits that ULEVs will help to make in the future i.e. reduce cost to NHS etc.
- A new central government led educational campaign is also needed to support all

	<p>proposed interventions and to support the roll out to businesses and consumers. This should be flexible enough for local variation but with key strong national messages and brand identity. Revenue support at a local level will also be needed for dedicated staff to implement changes.</p>
<p>7.</p>	<p>Question - How could the Government further support innovative technological solutions and localised measures to improve air quality?</p> <p>Local Authorities are best placed to use devolved funding to develop and deliver interventions with partners and stakeholders. The locally developed West Yorkshire Transport Strategy and West Yorkshire Low Emission Strategy recommend a range of appropriate actions to improve air quality. These include the following;</p> <ul style="list-style-type: none"> • ‘West Yorkshire Low Emission Procurement Guide’ for local authorities to support low emission fleet and services procurement • EcoStars – fleet efficiency improvement programme for public and private sector to improve driver behaviour and fleet emission performance. • West Yorkshire Air Quality and Planning Technical Guide– establishing financing mechanism for new developments to mitigate potential development related emission increases <p>Car Clubs are an effective way of influencing car ownership and usage, especially when integrated with public transport. The West Yorkshire and York Car Club was established in 2015 using £75k of DfT funding and has increased travel choice away from private car ownership for residents and businesses in the region. DfT funding has been used to pump prime several low emission vehicles – including pure electric - in key areas to integrate with public transport usage. The operation has grown in size, with over 3,000 members and coverage in all West Yorkshire districts. These types of schemes require financial support to mature into successful operations.</p>
<p>8.</p>	<p>Question - Do you have any other comments on the draft UK Air Quality Plan for tackling nitrogen dioxide?</p> <p>WYCA welcomes government action on air quality and is committed to delivering improved air quality across the region, as part of the Leeds City Region’s Strategic Economic Plan (SEP) vision for ‘good growth’ in the economy. The SEP objectives include delivering quality places for people to live and work, and providing support to move to a low carbon economy.</p> <p>Our draft West Yorkshire Transport Strategy – that will replace the existing Local Transport Plan - will deliver the SEP by creating the infrastructure for growth and ensuring residents and businesses benefit from cleaner, health places to live, by tackling air quality and environmental impact through investment in low carbon and low emission transport.</p> <p>WYCA has been successful recipients of several DfT/OLEV funding opportunities for low emission bus technology including Clean Vehicle Technology Fund, Clean Bus Technology Fund, Low Emission Bus Scheme and ULEV Taxi Scheme.</p> <p>A summary of WYCA’s response to the draft Air Quality Plan is as follows;</p> <ul style="list-style-type: none"> • DEFRA’s draft Air Quality Plan addresses the very narrow issue of Nitrogen Dioxide and mitigation against potential European Infraction fines therewith. It should be an opportunity to also address other significant emissions (e.g. Particulate Matter) and public health concerns (e.g. physical inactivity) which are central themes of the West

Yorkshire Low Emission Strategy – WYCA's adopted policy position on air quality and transport emissions. The Plan also omits to identify how the proposed actions will support a low carbon future.

- The Plan names three West Yorkshire authorities; - Leeds, Bradford and Wakefield, as having modelled legal exceedances of Nitrogen Dioxide by 2020, however the Plan states the modelling outputs are not yet considered definitive with a modelling accuracy of +/- 30%. Leeds was mandated in DEFRA's initial Air Quality Plan in 2016 to prepare a Clean Air Zone (CAZ) and is progressing implementation. This revised Air Quality Plan is ambiguous regarding legislative processes, legal requirements and responsibilities for implementing CAZs. It does not provide clarity to the authorities of Bradford and Wakefield on the implications of being named.
- WYCA will support the implementation of CAZs in West Yorkshire authorities where required. Charging CAZs appear to be the only modelled solution to deliver effective air quality improvement. Local authorities will need clarity asap on CAZs, to prepare for implementation and to distil information to the public, businesses and other stakeholders.
- The Air Quality Plan fails to recognise the threat of the displacement of older vehicles to non-CAZ mandated areas or the necessary mitigation. Neither does it consider users switching to other polluting vehicles exempt from CAZ restrictions.
- WYCA recognises the following measures outlined in the Plan as potentially the most effective activities to reduce emissions;
 - Emission abatement retrofit technology is likely to be the most value for money solution to achieving compliance for Hackney Carriage wheelchair accessible vehicles, buses and light/heavy goods vehicles in the shortest period of time. Retrofit should be open to all operators and authorities nationwide to mitigate the potential for vehicle displacement to non CAZ areas.
 - A vehicle scrappage scheme towards ULEV purchase is likely to be effective in bridging the financial gap for many residents and businesses in purchasing a new low emission equivalent vehicle. However, the scheme needs to be equitable – ensuring all have opportunity to replace older vehicles. This scheme should be considered for wider sectors than the private car to include LGVs, HGVs, buses and trains. This also needs to be supported by a substantially increased electric vehicle charge point network.
- Government has an opportunity with this Plan to create a cohesive strategic approach to environmental action from cross-government departments in terms of delivering policy and funding.
- Local authorities are best placed to take action on air quality. Government should provide greater devolved powers and funding to design and deliver local programmes as soon as possible.
- The government's preference for short term funding competitions prevent longer term cross-boundary partnership working to deliver cohesive air quality schemes e.g. a high quality network of ULEV refuelling infrastructure. This limits confidence for businesses operating nationwide to invest in ULEV fleets.
- Whilst vehicle technology will address emissions, it fails to deal with wider economic,

	<p>social and environmental impacts, e.g. congestion. Greater investment in low emission sustainable transport - public transport, walking and cycling - will address a range of priorities.</p>
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