

UK Air Quality Plan ~ Response from Campaign for Better Transport

June 2017

Campaign for Better Transport is a leading charity and environmental campaign group that promotes sustainable transport policies. Our vision is a country where communities have affordable transport that improves quality of life and protects the environment.

We welcome the opportunity to comment on the draft UK Air Quality Plan. The need for action on air pollution is grave and urgent. Air pollution in the UK breaches legal air quality limits. Dirty air causes tens of thousands of people to die early each year, and contributes to life-limiting conditions in many more. Children whose lungs are still developing are particularly at risk.

The links between motor vehicle traffic and air pollution are well-established. Some 80% of NO_x in areas exceeding EU limits comes from road transport, primarily diesel vehicles. Latest figures indicate that 97% of all modern diesel cars emit more toxic nitrogen oxide (NO_x) pollution in real-world conditions than in laboratory compliance testing, contributing further to illegal pollution levels.

The consultation on the plan asks a number of questions which we set out below, together with our response.

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

Air pollution is at lethal and illegal levels, with urgent action required. Under current plans, children born today will have started school before they have air that is fit to breathe. We are not at all satisfied that the plan will deliver the legal requirement to tackle the problem of air pollution as quickly as possible. The plan should be comprehensive, effective and deliverable. The proposals set out in the May 2017 consultation risk failing on all counts.

Air pollution is a problem in communities across the country. The vast majority of local authority districts have one or more air quality management areas. However, having identified (section 41) forty local authorities that breach NO₂ levels, the paper says “this is not a list of local authorities that will have to implement a Clean Air Zone.” As a minimum, the Government should indicate the intention to designate these as Clean Air Zones now: or better still, introduce a complete national network covering all local authorities. By failing to do either, it risks leaving too many communities to continue to suffer unhealthy air for longer.

The accompanying technical report makes it clear that charging zones are the most effective means to address air pollution¹, yet the draft plan explicitly de-prioritises this proven solution. By making charging zones the option of last resort, instead requiring local authorities to explore all other options first, the plan makes it harder, not easier, for effective action to be taken. By failing to provide adequate financial resources for local authorities to implement the best option for their

¹ https://consult.defra.gov.uk/airquality/air-quality-plan-for-tackling-nitrogen-dioxide/supporting_documents/Technical%20Report%20%20Amended%209%20May%202017.pdf

area, a policy that is already weak becomes even harder to deliver. There is a real risk that the Air Quality Plan as currently proposed will not meet the test set by the High Court that it must aim to achieve compliance by the 'soonest date possible'.

2. 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? What factors should local authorities consider when assessing impacts on businesses?

We are facing a public health emergency. The purpose of Clean Air Zones is to deliver air quality that complies with legal standards on pollution as soon as possible. Any measure that falls short of this will be a public policy failure. Local authorities should be given the powers and resources to deliver whatever measures are needed to deliver clean air in their areas, including charging zones as a priority option not a last resort.

Charging zones are not only the most effective way to tackle air pollution but also contribute to the costs of tackling pollution. Residents in the areas most affected should not face the added burden of paying through general taxation to clean up pollution to which they are exposed yet have not generated. The "polluter pays" principle should be followed.

Local councils are already struggling to deliver core services which contribute to improved air quality, such as road maintenance and modern bus services: it is unreasonable to expect them to investigate and implement "innovative proposals" for tackling air quality without extra funding or revenue raising powers.

Businesses, their staff, suppliers and customers, are all part of the community and have the same rights to breathe clean air and the shared responsibility to play their part in delivering clean air. In particular, Councils should be encouraged to prioritise measures to reduce single occupancy car commuting to work, which is a huge contributor to traffic and hence to poor air quality. Local authorities can assist by investing in good quality public transport options for employees and customers, and by supporting smarter last mile delivery solutions for freight. These measures are the most effective way to deliver air that meets legal health standards: they can also benefit business by connecting more people to jobs, and revitalising retail high streets and local traders by increasing footfall.

Councils should be encouraged to implement CAZs in ways that maximise economic, social and environmental benefits overall: for example, in assessing the impact of measures they should consider the public health benefits of promoting cycling and walking, and the economic benefits of public realm with reduced traffic.

We support charging-based Clean Air Zones as being the most effective way to deliver legally compliant air quality. However we note real concerns that real world performance of vehicles is generally more polluting than the laboratory tests, and that some vehicle owners are modifying their vehicles post-purchase, rendering them less compliant. Existing remote sensing technology² can be used to operate Clean Air Zones based on "real time" enforcement that measures live emissions, rather than registration based on lab-tested vehicle types: this would not only be the most effective approach, but would also be the fairest, based on the established "polluter pays" principle. This would also enable local authorities to identify and target the most polluting vehicles rather than rely on broad categories that are not all equally polluting in practice.

² https://uk-air.defra.gov.uk/assets/documents/reports/cat20/1607061156_DEFRA_innovative_tech_Final.pdf

3. 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? 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? 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? 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?

Government should target funding on the most effective means to cut pollution rather than the least unpopular. Local authorities need support in implementing these solutions in terms of staff capacity as well as capital funding. The most effective measures are those using financial incentives to change behaviour as seen in the London congestion zone and Nottingham's Workplace Parking Levy.³

Conventional parking management including charges for on- and off-street parking and residents parking schemes can be very effective at controlling traffic and air pollution, but authorities have been discouraged for using these measures. One simple way to support local authorities would be to implement section 6 of the Traffic Management Act 2004, which will give councils the powers to enforce moving traffic offences. This would allow local authorities to enforce a ban on pavement parking to make walking safer and more attractive for people and allow junction (yellow hatch) bans to be enforced as the flouting of road markings and blocking of junctions often causes unnecessary congestion and pollution.

Investment in local infrastructure should focus on improved public transport, walking and cycling, and railfreight provision, rather than trying to make motor vehicle dependency more sustainable. Such infrastructure delivers wider social, environmental and economic benefits in addition to improving air quality and so represents better use of public funds than subsidising private motor vehicle use.

There is a wealth of positive experience in local authorities from the Local Sustainable Transport Fund, demonstrating the wider social and economic benefits of modal shift and investment in local transport: for example, encouraging sustainable travel helps increase the pool of labour for companies by increasing access to non-car users, while reducing the severe congestion that occurs on many key road corridors and improving wider connectivity is vital to supporting business productivity and creating new jobs.⁴

A universal scrappage scheme would be extremely expensive, and spending large amounts of public money on purchasing private vehicles would raise a number of ethical concerns. However a national framework for scrappage schemes is needed. References to any scrappage scheme being deliverable at local authority level (section 33) raise concerns that schemes could be patchy and inconsistent, leading to a 'postcode lottery' which is seen to be unfair without delivering a comprehensive solution.

A more deliverable approach would require a targeted scrappage scheme to deal with the most polluting and most essential vehicles; a priority retrofit scheme for bus and taxi fleets plus other essential vehicle users (eg emergency service vehicles). A trade-in scheme where diesel vehicles can be exchanged for a season ticket, car club membership or e-bike would be much more

³ <http://www.bettertransport.org.uk/media/8-June-2016-workplacel-levy-tracks>

⁴ <http://www.bettertransport.org.uk/sites/default/files/research-files/Improving%20local%20transport%20helps%20the%20economy%20-%20experience%20from%20the%20LSTF.pdf>

affordable than a vehicle upgrade scheme, as well as making a more significant contribution to improving air quality. Any scrappage scheme should aim to deliver fewer cars not simply newer cars. The paper gives no clear guidance and no funding for such necessary measures.

We welcome support through the National Productivity Investment Fund for bus retrofitting but note that the wording (section 32) around this is weak, saying that further support “could” be provided to local authorities who wish to run retrofitting schemes.

The OLEV grants (section 59) specifically exclude e-bikes, an error that should be addressed. E-bikes and e-cargo bikes make a valuable contribution to addressing congestion and pollution and are a viable alternative to cars and vans that deserve support.

4. How best can governments work with local communities to monitor local interventions and evaluate their impact?

An evidence based policy would prioritise the most effective rather than the most popular solution, i.e. charging based Clean Air Zones. We note that ADEPT, representing local authority expert officers, has called for a more strategic approach to monitoring of air quality across the country, the introduction of a system that clearly advises people not to use their cars when pollution levels are high, the scrapping of diesel vehicles and prioritising walking, cycling and the use of public transport wherever possible.⁵

A comprehensive national network of Clean Air Zones would facilitate data collection and better monitoring of the plan’s effectiveness. This could be combined with anonymised data on travel patterns from public transport operators, mobile phone companies and ANPR systems to identify where there is the greatest need and opportunity for low pollution transport provision.

Highways England’s work on the Strategic Road Network should be brought within the UK Air Quality Plan as a key player in delivering improved air quality, and empowered to contribute their dedicated funds for air quality work outside the narrow boundary of the SRN in partnership working with local authorities to deliver clean air zone compliance. This could include use of speed limits to reduce emissions; improved provision of EV charging points on the Strategic Road Network; better integration with bus, coach and rail freight interchanges; sharing best practice on pollution absorbing construction materials.

There is existing expertise in monitoring the benefits of local interventions such as the Local Sustainable Transport Fund, Green Bus Fund and similar schemes which could usefully be applied when assessing the effectiveness of local Clean Air Zones.

5. Which vehicles should be prioritised for government-funded retrofit schemes?

Public money should be targeted where it will deliver greatest public benefit. Any measure to reduce the number of polluting vehicles on the road will have some benefit, but the priority for public funding should be those vehicles which serve the public.

Buses, coaches and black cabs should be the priority for retrofit and upgrade, along with emergency service vehicles. Buses in particular can play a significant role in delivering Clean Air Zones. We reject the characterisation of buses as among the most polluting vehicles. Recent research from Prof David Begg for Greener Journeys found that the latest Euro VI diesel buses produce 95% fewer emissions than previous models, and less emissions overall than a Euro 6

⁵ <http://www.adeptnet.org.uk/news/air-quality-report-must-go-further-clean-air-zones-says-adept>

diesel car, despite having the capacity to carry up to 15 times more passengers. On a per passenger basis, modern diesel cars also produce 10 times more NOx emissions than modern diesel buses. Bus retrofitting would cost the taxpayer just £12 per kilogram of Nitrogen Oxides saved - 15 times less than a diesel scrappage scheme, which would cost £175 cost for every kilogram of NOx saved.⁶

The priority for assistance on tackling pollution from HGVs and vans should be through a modal shift package. Shifting long distance freight from road to rail in line with the Government's Rail Freight Strategy would bring significant benefits. HGVs are responsible for 21 per cent of nitrogen dioxide emissions while only accounting for 5 per cent of vehicle miles.

Rail freight should be part of the solution as it produces up to 15 times less nitrogen dioxide emissions than HGVs for the equivalent journey. Strategic Rail Freight Interchanges (SRFI) have an important contribution to make: Daventry SRFI removes 65 million lorry miles mainly off the trunk network each year.⁷ Rolling out rail electrification should continue as an important part of any clean air strategy, complemented by research into alternative locomotive fuels. While rail freight diesel locomotives emit far less NOx and particulates than HGVs, an electrification or retrofit programme is still needed.

A smarter last mile logistics plan should be a key part of Clean Air Zones. Investment in local consolidation centres with delivery by low emission vehicles has proved successful in cities including Paris and Gothenberg, with a similar scheme implemented to service retailers on Regent Street in central London. This approach would also cut congestion, with resulting time and cost savings to businesses.

We are concerned that reliance on switching to electric vehicles is not is not a universal solution, given what we know about carcinogenic PMs from braking systems. Nor does continuing car dependency, albeit on cleaner vehicles, address the problems of obesity, congestion, managing densification of cities and other challenges.

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

Consumer confidence in the motor industry has been shaken by the Dieselgate scandal. The latest ICCT report confirms that in real world conditions, on average, diesel cars produced 2.3 times NOx emission limits.⁸ It will take more than improved information to address this. There may be a role for an independent monitoring & badging scheme for vehicles beyond the current emissions ratings but this would be expensive and complex to establish, particularly given Brexit.

The paper rightly recognises that pollution emissions from vehicles in real world driving conditions exceed those recorded in lab tests, even for the newest and 'cleanest' models. Particulates from braking systems and CO2 emissions from petrol engines also need to be reduced. Relying on improved vehicle technology alone will not solve the problem: maintaining or increasing the number of vehicles on the road will not address problems of congestion, obesity, road safety or noise pollution. Ultimately, we need fewer cars not just newer cars.

⁶ <http://www.greenerjourneys.com/publication/improving-air-quality-towns-cities/>

⁷ <http://www.bettertransport.org.uk/invest-rail-freight-cut-road-congestion-research-shows>

⁸ <http://www.theicct.org/nox-europe-hdv-ldv-comparison-jan2017>

Any public information campaign should include alternatives to buying cars, such as joining a car club or using modern smart ticketing public transport services. The information campaign could be funded by a levy on new diesel purchases, on the “polluter pays” principle.

It is not only information that is needed. Fiscal measures have the double benefit of incentivising less polluting behaviour while also helping generate the revenue to implement the necessary changes. Vehicle Excise Duty needs to be reviewed in order to discourage use and purchase of diesel vehicles. Options include a higher levy on new diesel purchases: first year VED graduation for new vans, as for cars; and review of the HGV levy.

The current OLEV grant scheme should be expanded, particularly targeting small businesses and residents in areas not well served by public transport, and should include funding for e-bikes and e-cargo bikes. One option would be a “feebate” scheme⁹ where a purchase tax is imposed on the highest real-world emitters with the revenue used towards a reduction in costs for electric vehicles and e-bikes, through an expanded OLEV scheme, as well as towards tax free employer support for mobility packages including public transport and other sustainable transport options.

7. How could the Government further support innovative technological solutions and localised measures to improve air quality?

Faith in technological solutions has been shaken by the dieselgate scandal which exposed the difference between lab tests for vehicle certification, and the actual emissions in real world driving conditions. We would like to see more rigorous and independent testing of vehicle emissions as part of future vehicle approval regimes, whether as part of EU regulations, or on a UK basis.

The EV sector is already progressing technological improvements but a key barrier to the rollout of electric vehicle charging networks is access to kerb and parking space. Residents and businesses in high density urban centres most affected by air pollution are those least likely to have access to off street parking. Local plans should require provision of publicly accessible off street EV charging places as part of all residential and commercial schemes over a certain size.

While electrification has benefits not only for air quality but also decarbonisation, we believe that a comprehensive solution must deliver fewer cars not simply newer cars. Retrofitting existing diesel bus and rail fleets, and research to support this, represents a better investment of public funds than focusing on individual motor vehicles, given their contribution to reducing congestion and cutting carbon emissions.

Natural solutions also have a role to play: green walls, tree stands and other natural interventions not only absorb CO₂ and reduce noise impacts but make useful contribution to capturing PMs from vehicle emissions.

Green procurement is important to reduce emissions, to lead by example and to stimulate the market for low and ultra-low emission vehicles. The Bus Services Bill provides an opportunity for greener vehicles to be specified. Where appropriate, local authorities may be able to play a leadership role by procuring and leasing greener vehicles for local operators, to facilitate this process.

Maintaining and expanding rail freight grants, and giving a clear steer in planning guidance in support of rail freight terminals, would also make a significant contribution.

⁹ http://www.bettertransport.org.uk/sites/default/files/research-files/Feebates_report.pdf

The draft Clean Air Zone guidance brought together a number of policy initiatives which contribute to improving air quality through reducing the number of polluting vehicles in use and which should be prioritised in the UK Air Quality Plan.

In particular we support:

- Investing in low emission bus priority lanes and zones to encourage modal shift;
- Investing in dedicated cycle lanes to encourage active travel;
- Restrictions on vehicles close to schools, particularly at peak pollution times;
- Variable pricing of parking permits by vehicle emissions;
- Smarter last mile logistics, including use of cargo bikes and ultra/zero emission vehicles;
- Workplace parking levy, which has proved successful in Nottingham.

Many of these interventions have multiple benefits not only to air quality but also for tackling obesity, carbon reduction, social inclusion, better access to jobs and services, and more liveable cities.

However, we reject the idea that removing speed control measures such as speed bumps is a positive measure. Local councils and the communities they serve have introduced speed control measures to make streets safer, particularly in areas around schools. It is not acceptable to reduce safety in order to improve air quality, nor is it necessary. Most of the pollution comes from high volumes of traffic on major routes, not traffic calmed neighbourhoods.

In addition, we believe additional local powers and national policy changes are required to allow for:

- area-specific bans on diesel and other polluting vehicles;
- rolling out PTAL type site appraisal in local plans to encourage locating new homes and jobs near public transport hubs
- a scrappage scheme that incentivises non-motorised replacement (e-bikes, season tickets, etc);
- a change to the appraisal framework for new transport infrastructure that places a far higher priority on air quality impacts (requirement for all schemes to be at least air quality neutral).
- travel planning for major employment and visitor centres, such as schools, hospitals, business parks, with powers to review business rates to reward low vehicle dependency
- road user pricing (using existing congestion charge powers) with pricing linked to vehicle emissions. The lack of emissions-related charges is a serious omission from recent proposals for the Severn Crossings tolls.¹⁰
- HGV distance based lorry charging which takes into account the air quality emissions of lorries: we note that DfT has committed to reviewing the existing time-based HGV levy.

8. Do you have any other comments on the draft UK Air Quality Plan for tackling nitrogen dioxide?

Campaign for Better Transport welcomed the DEFRA/DfT Clean Air Zone guidance published last year, as recognising that motor transport is the single greatest cause of air pollution and that sustainable transport policies were the best solution. We noted it could go further in terms of support for scrappage schemes, charging zones and localised diesel bans, and that funds for local authorities would be needed to deliver CAZ plans: but we felt it was an important step in the right direction.

¹⁰ <http://www.bettertransport.org.uk/blog/roads/severn-toll-proposals-are-missed-opportunity>

This draft UK Air Quality Plan represents a disappointing backwards step. It gives no greater clarity on scrappage schemes. By deprioritising charging zones and remaining silent on localised diesel bans, it fails the test of delivering clean air as soon as possible.

The plan should be a means to achieve best practice in every area, not level down. We do not want to see more polluting vehicles dumped in areas with lower standards. By failing to identify a national network of Clean Air Zones and failing to fund local authorities to deliver what is proposed, it risks being neither comprehensive nor effective. We recognise the challenges of imposing potentially unpopular measures at a time of economic uncertainty but note there are economic as well as environmental benefits in investing in sustainable local transport.

There is also a need to join up with wider transport and planning policies. Building major new roads is an expensive way to increase traffic levels, and will increase congestion in towns and cities, undermining action to tackle pollution.¹¹ Using the planning system to reduce car dependency, locating new homes and jobs near new or existing transport hubs, is a necessary to deliver cleaner air. There are many examples of good practice that could be rolled out nationwide (including in the Campaign for Better Transport's report 'Getting There' and the 2008 Masterplanning checklist).¹² We agree with Environmental Protection UK that all Government initiatives and programmes, including energy policy and the industrial strategy, should be optimised to deliver air quality benefits.¹³

The next Government must meet its obligation of delivering legal compliance with clean air standards and giving people in every community air that is fit to breathe at the earliest opportunity.

The solutions are proven: what is needed is the funding and powers to deliver them. This draft plan must be significantly improved as set out in our response for that goal to be achieved.

June 2017

Bridget Fox
Campaign for Better Transport

Campaign for Better Transport's vision is a country where communities have affordable transport that improves quality of life and protects the environment. Achieving our vision requires substantial changes to UK transport policy which we aim to achieve by providing well-researched, practical solutions that gain support from both decision-makers and the public.

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¹¹ <http://www.cpre.org.uk/resources/transport/roads/item/4543-the-end-of-the-road-challenging-the-road-building-consensus>

¹² <http://www.bettertransport.org.uk/transport-planning>

¹³ <http://www.environmental-protection.org.uk/policy-areas/air-quality/>