

Defra consultation on draft UK Clean Air Strategy ~ response from Campaign for Better Transport

August 2018

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 Clean Air Strategy. The need for action on air pollution is grave and urgent, and the links between motor vehicle traffic and air pollution are well-established.

Summary

Overall, we welcome the breadth of the strategy in examining a wide range of pollution sources to present a joined-up approach to delivering better air quality.

In particular, we welcome:

- Recognition of the intrinsic value of environmental protection
- Potential for new local powers to tackle air pollution
- Recognition of the critical role for modal shift in improving air quality.

However, in several areas we feel the strategy lacks sufficiently strong targets or adequate resourcing to deliver the significant and rapid changes needed.

In particular, we would like to see:

- A new Clean Air Act, enshrining the right to breathe clean air into domestic law
- Stronger action with clearer targets to reduce road traffic, including surface transport to ports and airports, and to promote modal shift
- A pollution veto on new developments, such as road building, that would harm air quality
- More recognition of the vital role of modern buses in improving air quality
- Renewed commitment to rail electrification and investment in alternative rail fuels
- Funding and powers to deliver these policy goals.

The consultation asks a series of questions, which we set out below, together with our responses, focusing on transport-related issues.

1. Understanding the problem	
Q1. What do you think about the actions put forward in the understanding the problem chapter? Please provide evidence in support of your answer if possible.	We understand the necessity of having a baseline for measurement and to track progress: however, we would be concerned if investing more in understanding the scale of the problem diverted resources from solving it.
Q2. How can we improve the accessibility of evidence on air quality, so that it meets the wide-ranging needs of the public, the science community, and other interested parties?	<p>We welcome the accessibility and transparency from sharing air quality information in a single public access website. The visible impact of mapping air pollution levels (for example before and after levels where traffic reduction has been implemented) is a powerful tool for delivering change.</p> <p>We would be concerned if that crowded out recording and sharing of air quality data from locations that may not be priorities for official monitoring. We strongly welcome providing a pathway to record and integrate findings from citizen science, body worn monitors, etc.</p>
2. Protecting the nation's health	
Q3. What do you think of the package of actions put forward in the health chapter? Please provide evidence in support of your answer if possible.	<p>We welcome the clear presentation of the evidence on health impacts from traffic, including the fact that deprived communities are more likely to experience adverse health effects from poor air quality because they are more exposed to air pollution, for example, by being close to major roads.</p> <p>We welcome the direction of the proposed actions, particularly around better information sharing on pollution-reducing behaviour, and on enabling the health impacts of air pollution to be considered in relevant policy decisions.</p> <p>We would like to see this strengthened to be a requirement on local and national authorities, and on the Planning Inspectorate, with an air quality veto able to be applied when developments, such as new roads, would have an adverse impact on air quality. This should be reflected in guidance accompanying the new National Planning Policy Framework and any revision to the National Networks National Policy Statement.</p> <p>We welcome the principle of comprehensive new powers designed to enable targeted local action and would be happy to advise on what these could include in terms of reducing transport-related emissions. For example, initiatives such as extending the powers in the Traffic Management Act 2004 (part 6) to all local authorities, encouraging use of existing powers to introduce congestion charges and Workplace Parking Levies, and rolling out successful schemes such as the Healthy School Streets pilots from Scotland and London, would all have a positive impact and require little in the way of additional legislation.</p> <p>There is an opportunity to build on these existing powers</p>

	<p>in a new Clean Air Act, which could include targets for supporting active travel as part of a wider programme to improve public health.</p> <p>We would like to see more in the Clean Air Strategy on promoting active travel as part of healthy lifestyles: this will not only assist in reducing transport-related emissions but will also deliver wider health benefits. We share the calls from Cycling UK and others for the Government to deliver on its goal of £10 per head expenditure on walking and cycling.</p>
<p>Q4. How can we improve the way we communicate with the public about poor air quality and what people can do?</p>	<p>Unlike some emissions, transport-generated pollution is easily addressed by behaviour change and modal shift.</p> <p>There is potential to make greater use of high pollution alerts, and to combine these with specific messages and incentives to use less polluting forms of transport, for example, enabling local authorities to implement car-free days, or Highways England to reduce variable speed limits, when pollution reaches critical levels. This could be reinforced by fiscal incentives, as noted in the answer to Q.11 below.</p>
<p>3. Protecting the environment</p>	
<p>Q5. What do you think of the actions put forward in the environment chapter? Please provide evidence in support of your answer if possible.</p>	<p>We strongly support the position statement that clean, green and healthy environments in urban and rural areas are an essential component of progress, not a barrier to economic development.</p> <p>We welcome the recognition that PMs from motor vehicles have adverse impact on the natural environment as well as human health. We are disappointed therefore that there are no actions in this chapter to address the adverse impact of motor traffic and roads in general on the natural environment. The only current solution to PMs from tyre and brake wear is to reduce vehicle use.</p> <p>There is a range of proven interventions for traffic reduction, combining demand management and provision of sustainable transport alternatives. The recent independent evaluation of the Local Sustainable Transport Fund for the DfT found that such interventions demonstrate excellent value for money. They also deliver wider environmental benefits, reducing greenhouse gas emissions and supporting biodiversity.</p>
<p>Q6. What further action do you think can be taken to reduce the impact of air pollution on the natural environment? Where possible, please include evidence of the potential effectiveness of suggestions.</p>	<p>We believe that as far as possible pollution should be tackled at source. However, where mitigation is needed, we would like to see greater use of green infrastructure, for example the use of tree planting, green walls and sustainable drainage systems.</p> <p>Unlike hard-engineered solutions, green infrastructure also brings benefits in reducing greenhouse gas emissions, supporting biodiversity and enhancing the natural landscape.</p>

4. Securing clean growth and innovation	
<p>Q.7. What do you think of the package of actions put forward in the clean growth and innovation chapter? Please provide evidence in support of your answer if possible.</p>	<p>We welcome the strategy's commitment to move to cleaner power sources. We support moves to support provision of renewable energy infrastructure: having sufficient generating capacity is essential for meeting demand for transport electrification while achieving CO2 reduction targets.</p> <p>We strongly support moves by HM Treasury to end red diesel subsidies for auxiliary engines and machinery such as Transport Refrigeration Units. Transport refrigeration units emit up to 93 times more NOx and 165 times more PM than the standard Euro 6 diesel car. Continuing to charge less for the fuel for these units will undermine efforts to clean up cities' air quality by removing any incentive to move to cleaner fuel types. The low fuel tax for refrigeration units provides a perverse incentive for supermarkets and other companies to continue using diesel, instead of adopting alternative cleaner technologies that are available.</p>
<p>Q8. In what areas of the air quality industry is there potential for UK leadership?</p>	<p>There is potential for the UK to be a leader in electric bike manufacture and low emission bus manufacture.</p>
<p>Q9. In your view, what are the barriers to the take-up of existing technologies which can help tackle air pollution? How can these barriers be overcome?</p>	<p>In the transport sector, the freeze on conventional fuel duty acts as a disincentive to the take-up of new LEV technology. OLEV grants currently exclude e-bikes and e-cargo bikes: such grants would enable small businesses in particular to switch to these highly efficient modes for courier and delivery services. A baseline study by Austrian Mobility Research for the EU Cyclelogistics consortium found that on average 51 per cent of all motorized freight trips in European cities could be shifted to bicycles or cargo bikes, with consequent benefits to air quality and also in reducing CO2 emissions and congestion.</p> <p>The distant targets in Road to Zero mean there is a lack of market incentives for fleet buyers to switch to EVs or other low emission vehicles. An earlier target would kick-start demand for LEVs and incentivise manufacturers to bring more of their LEV products to market. Research from Transport&Environment has found that motor manufacturers are reluctant to promote EVs compared to marketing fossil fuelled cars. While around 30 per cent of consumers say they would consider buying an electric car, just 1.5 per cent of advertisement spend in 2017 was on zero emission models. The very limited choice of electric cars, limited availability for test drive or purchase, and long waiting times all contribute to low sales.</p>
<p>Q10. In your view, are the priorities identified for innovation funding the right ones?</p>	<p>We would like to see priority given to those innovations that would tackle multiple goals (including reduction of greenhouse gas emissions, promotion of healthy lifestyles, and no net loss of biodiversity) in addition to improving air quality.</p>

5. Action to reduce emissions from transport

Q11. What do you think of the package of actions put forward in the transport chapter? Please provide evidence in support of your answer if possible.

We support the recognition that transport is a key sector in addressing air quality.

Any effective strategy must seek to decarbonise transport for essential use, reduce the need to travel where possible and promote the use of more sustainable modes as a priority.

We are disappointed that the Clean Air Strategy fails to commit to delivering further measures to tackle emissions from road transport, which remain the main source of illegal levels of air pollution in the UK.

While we support the direction of travel, the current targets are too distant, with a lack of interim targets, and insufficient funding and powers to deliver the necessary and urgent changes required.

Road

We have previously commented on Road to Zero. We support ending all sales of new petrol and diesel cars by 2030 rather than the more distant Government target of 2040. Such a move would not only save lives but could help add £3 billion to the UK economy and create 14,000 industry jobs, while reducing the current gap in meeting the UK's carbon budgets by up to 85 per cent, according to research from Green Alliance and WWF-UK. We are disappointed that Road to Zero fails to commit to introducing or reforming fiscal measures needed to incentivise the uptake of ultra-low emission vehicles at scale. It also fails to commit to investment in modern public transport, or walking and cycling.

We have previously commented on the UK Plan for Tackling Roadside Nitrogen Dioxide Concentrations. We note an over reliance on Euro 6 standards from lab tests, given that real world driving emissions are generally far greater. It is concerning to see from the latest DfT Vehicle Registration statistics that the most popular models registered (including the petrol Ford Fiesta and diesel Nissan Qashqai) are among the most polluting in real world tests.

We note there is currently no technical solution to PMs from brake and tyre wear from road transport. While further research may be useful, the urgent priority is therefore to reduce the volume of such vehicles on the road through promotion of more efficient and sustainable alternatives.

A shift to rail freight will play an important long-term role in reducing non-exhaust particulates (PMs). While the latest Euro VI engine technology claims to reduce exhaust particulates, non-exhaust particulate pollution from HGV tyres and brakes will remain a serious problem for which there is no current solution, especially for trucks which have large tyres.

We are concerned that the Clean Air Strategy is silent on

buses. Buses are vital for connecting remote and low income communities and as a part of modern city transport networks. Research from Greener Journeys reports that the latest Euro VI diesel buses produce 95 per cent fewer emissions than previous models, and less emissions overall than a Euro 6 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. For older buses, retrofitting with filters would cost £12 per kilogram of Nitrogen Oxides saved. By providing a highly efficient alternative to car use (one double decker bus has the same capacity as around 70 single occupancy cars), buses help reduce overall vehicle emissions including PMs.

We note the supportive reference to the Highways England air quality fund, part of the Road Investment Strategy (RIS). While we have been strongly supportive of the creation of the designated funds within the RIS, we are concerned that the air quality fund has not been used as effectively as it could have been to date. In particular there has been an over reliance on finding an elusive technical solution, rather than working with allies to deliver proven solutions around environmental mitigation, use of green infrastructure and measures to reduce traffic speed and volume and promote modal shift. With other NGOs we produced a joint report 'Rising to the Challenge' which looks at the potential for reducing the environmental impact of the Strategic Road Network, including from air pollution.

Maritime

We welcome recent moves by the International Maritime Organisation to agree targets for zero CO2 emissions by 2050, and to confirm the global 0.5 per cent sulphur standard for marine fuels from 2020, and look to the UK maritime sector to take a lead in implementing these, backed by the new Clean Maritime Council. There is the opportunity to make use of a range of cleaner technologies including low sulphur fuel, gas or dual-fuel engines, and use of shore-side electricity when in port.

We commend the proposals on standards and enforcement developed by Transport&Environment, including transposing the international IMO standards for NOx emissions into UK law and adopting additional legislation to address NOx emissions from the existing fleet, and considering market-based measures to make polluters pay a fair price for the emissions the shipping sector is responsible for.

We welcome the proposal for port Air Quality Strategies, which should be integrated, covering surface port traffic as well as shipping. This should include setting a target for per cent of goods arriving by rail. This is particularly important given the Government's ambition to expand port business post-Brexit.

Rail

We welcome the recognition that rail is a cleaner form of transport.

Greater use of rail freight in particular has potential to make a significant contribution to improving air quality. An average freight train can remove up to 76 HGVs from our roads. Rail freight produces 76 per cent less carbon dioxide and up to fifteen times less nitrogen oxide emissions and 90 per cent less small particulate matter than the equivalent road journey.

We regret the pausing of the vital programme of rail electrification. Rail electrification is vital in tackling air pollution as well as meeting the UK's legally binding climate change targets and improving the resilience and performance of the rail network.

We support calls by Freight on Rail for the Government to provide support for retrofitting existing rail freight diesel locomotives and for a longer term replacement locomotive plan where electrification is not an option. We note that around £200m DfT funding has gone into research into alternative fuels for HGVs: similar support for the rail freight industry is vital. We also believe that there will be useful evidence from the HGV analysis of alternative fuels which can be fed into rail freight locomotive research. Bimodal trains, using a combination of electric traction and battery technology, may be a practical alternative for branch lines and for traction in rail freight terminals.

We welcome proposals to assess air quality at stations, which should be integrated, covering access to the station as well as rail operations. This should include support for modern public transport interchange, restrictions on parking and measures to end vehicle idling.

Aviation

We are disappointed to see that this strategy remains weak on aviation with no new proposals.

Pollution sources within the aviation sector include aircraft; ground based operational vehicles within airports; supply chain vehicles; and surface transport of passengers, employees and freight.

We welcome the potential of liquid electro fuels to address a proportion of aviation emissions. However, reducing the total number of flight movements remains the most effective way to cut air pollution and CO2 emissions. We support fiscal measures, such as reform of air passenger duty and its replacement by a frequent flyer levy.

Modal shift

Cleaning up transport pollution requires fewer vehicles, not just newer vehicles. There is currently no solution to PMs from vehicle use, and even vehicles that are zero emission at tailpipe still contribute to congestion, obesity,

	<p>and noise pollution.</p> <p>We welcome the strategy's recognition that modal shift to lower emission modes of travel still plays a central role in reducing transport emissions. We welcome the stated commitment to encouraging more sustainable modes of transport like cycling, walking and public transport, and shifting freight from road to rail.</p> <p>These welcome commitments need to be backed by appropriate powers, resources and fiscal measures, and underpinned by clear cross-cutting policies such as a presumption against new road building; greater support for modern rail, light rail and bus services; a duty to prioritise walking and cycling in planning; and assisting public bodies and major employers with adopting and implementing sustainable travel plans.</p>
<p>Q12. Do you feel that the approaches proposed for reducing emissions from Non-Road Mobile Machinery are appropriate or not? Why?</p>	<p>We strongly support moves by HM Treasury to end red diesel subsidies for auxiliary engines and machinery such as Transport Refrigeration Units. Continuing to charge less for the fuel for these units will undermine efforts to clean up cities' air quality by removing any incentive to move to cleaner fuel types.</p> <p>We are concerned that the approach in the strategy seems vague and weak: it gives local authorities the responsibility to regulate without the resources to do so effectively.</p>
<p>9. Leadership at all levels (local to international)</p>	
<p>Q25. What do you think of the package of actions put forward in the leadership chapter? Please provide evidence in support of your answer if possible.</p>	<p>We support the aims of the package and would like to see the actions to deliver them strengthened, as set out in the answers below. The UK must commit to more ambitious air quality standards based on the latest WHO guidelines, and enshrine the right to breathe clean air into domestic law. It is vital that this right is extended to all parts of the UK through the appropriate devolved legislatures.</p>
<p>Q26. What are your views on the England-wide legislative package set out in section 9.2.2? Please explain, with evidence where possible.</p>	<p>We note proposed measures to compel recall of vehicles with faulty emissions control systems and to make tampering with such systems an offence. We welcome these steps: however they fall short of a comprehensive recall system for all vehicles breaking emissions standards in real-world driving conditions.</p> <p>We support the government's intention to bring forward new primary and secondary legislation to tackle air pollution. We support the idea of a new Clean Air Act, to provide effective binding targets; a national network of Clean Air Zones; and appropriate financial and regulatory support for local authorities to deliver them.</p> <p>A stand-alone Clean Air Act, delivered alongside broader principles set out within an Environment Bill, is essential. It should include details on how responsibilities are clearly apportioned between public bodies; requirements relating to air quality information sharing; and obligations on vehicles manufacturers to produce cleaner cars.</p> <p>We believe that the particulate matter exposure reduction</p>

	<p>goal must be enshrined in domestic legislation as a legally binding target, and that the Government should commit to adopting tighter, legally binding limit values in line with the existing WHO guideline values.</p> <p>We also recommend that the proposed new national environmental body should have a role in scrutinising air quality policy and in holding the government to account for meeting legally-binding limit values and targets.</p>
<p>Q27. Are there gaps in the powers available to local government for tackling local air problems? If so, what are they?</p>	<p>We have previously commented on the weaknesses in the Government's Clean Air Zone framework. Charging CAZs, although the most effective, are made a last resort. The mandatory CAZ hierarchy means that local authorities must regulate buses before tackling cars, with no local discretion to prioritise different vehicle classes. Even when charging zones are introduced, there are no powers to ban the most polluting vehicles, which can continue to 'pay and spray'. As a minimum, we would like to see the extension of Part 6 powers of the 2004 Traffic Management Act to all local authorities</p> <p>Effective local action is not just about powers: local authorities need resources too. In particular we advocate financial support for retrofit or replacement of public service vehicles. One potential funding source is the Air Quality fund held by Highways England, which could usefully be used to partner with local authorities whose areas are affected by the Strategic Road Network.</p>
<p>Q28. What are the benefits of making changes to the balance of responsibility for clean local air between lower and upper tier authorities? What are the risks?</p>	<p>In general, we support delegation of powers to the lowest effective level, with accompanying resources.</p> <p>There are risks that a patchwork of clean air zones with different standards could lead to the export of more polluting vehicles to areas with fewer restrictions. Therefore we support a national framework of Clean Air zones to ensure compliance with required standards for all, with individual local authorities free to pursue higher standards for their community.</p>
<p>Q29. What improvements should be made to the Local Air Quality Management (LAQM) system? How can we minimise the bureaucracy and reporting burdens associated with LAQM?</p>	<p>We welcome moves to simplify LAQM reporting, making best use of new technology and encouraging local authorities to work in partnership with neighbouring bodies and allies.</p>
<p>10. Progress against targets</p>	
<p>Q30. What do you think of the package of actions in the strategy as a whole?</p>	<p>Overall, we welcome the breadth of the strategy in examining a wide range of pollution sources to present a joined-up approach to delivering better air quality. However, in several areas we feel the strategy lacks sufficiently strong targets or adequate resourcing to deliver the significant and rapid changes needed.</p>
<p>Q31. Do you have any specific suggestions for additional or alternative actions</p>	<p>To help achieve compliance with clean air standards, we call for a combination of a robust network of Clean Air Zones including charging zones; fiscal measures to</p>

<p>that you think should be considered to achieve our objectives? Please outline briefly, providing evidence of potential effectiveness where possible.</p>	<p>discourage the most polluting vehicles; and accelerated promotion of modal shift to reduce traffic levels.</p> <p>Any publicly-funded scrappage scheme should be targeted at public service vehicles, including buses, rather than at private cars.</p>
<p>Q32. If you have any further comments not covered elsewhere, please provide them here.</p>	<p>n/a</p>

August 2018
 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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