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Dear Mayor Johnson

The Mayor's Draft Air Quality Strategy

We are writing to provide you with our views on your Draft Air Quality Strategy. Environmental Protection UK has considered the draft document, and welcomes the opportunity to comment.

1– About Environmental Protection UK

Environmental Protection UK brings together organisations from across the public, private and voluntary sectors to promote a balanced and innovative approach to understanding and solving environmental problems, through policy development and education. We are a registered charity with 110 years experience of environmental campaigning, public information provision, producing educational resources and policy formulation.

Environmental Protection UK's air quality policy committee has been involved in the development of this response. The committee brings together policy makers, regulators and practitioners from local authorities, consultants, developers, academics, industry, interested NGOs as well as members from Environmental Protection UK's regional divisions.

2 – Summary of Our Views

The Mayor's draft Air Quality Strategy comes at an important time for air quality in the UK. The issue of compliance with European limit values has been ongoing for some time, with many areas of London failing to meet the annual mean limit value for PM_{10}, and even larger areas of the UK as a whole likely to fail to meet NO_2 limit values that will come into force during 2010. However, air quality is not simply about compliance with EU Directives – it is a major public health issue. Poor air quality has a greater health impact than high profile issues such as passive smoking and vehicle accidents, and full compliance with the EU limit values will bring major benefits in terms of public health.

London presents the UK's largest air quality challenges, and urgent, concrete actions are needed to comply with EU limit values (even if the current efforts by DEFRA to

secure deadline extensions are successful), and to ensure that public health benefits are secured. The Mayor's role in achieving the EU Limit Values is not simply discretionary, and the GLA Act requires that the Mayor's Air Quality Strategy contain '...policies and proposals - for the achievement in Greater London of the air quality standards and objectives prescribed in regulations made under [the Environment Act].' We understand that the organisation ClientEarth has written to you with a wide-ranging reminder of the Mayor's legal responsibilities in the area of air quality.

In the past London has also acted as a exemplar of good practice in air quality management, with major initiatives such as Taxi Emission Standards, the Congestion Charge and of course the Low Emission Zone. These initiatives have demonstrated to the rest of the UK, and indeed the world, what can be done to tackle poor air quality.

Our tests for the success of the Mayor's draft Air Quality Strategy are therefore two – firstly will the strategy deliver compliance with EU air quality limit values across the city, and secondly will the strategy inspire other cities within the UK to take action on their own air quality problems? Our answer to the first test is unfortunately no – whilst there are a number of good policies within the strategy, the document as a whole fails to get to grips with the transport emissions that are behind the majority of London's air quality problems. Quantified, output focused and funded actions to bring the city to full compliance are notably missing, as indeed is a full commitment by the Mayor to compliance with the EU limit values. In addition to this lack of new action, the Mayor is proposing to delay or abandon current actions to improve air quality – namely Phase 3 of the Low Emission Zone, and the Congestion Charge Western Extension. Both of these measures have (or will have) delivered considerable benefits for air quality compliance, and pubic health.

The answer to the second test is similar. Many of the non-transport policies are innovative, interesting and likely to be examined by other UK local authorities. However, many other cities (and indeed some London Boroughs) are racing ahead in their approach to tackling transport emissions. Examples include the innovative use of bus Low Emission Zones by local authorities such as Cambridge, and, abroad, the approach taken to Low Emission Zones in Germany. Some actions of course need to be implemented at a Borough level, however real leadership by the Mayor could encourage a more uniform approach across the city.

Finally, we are disappointed that, in the strategy document, the Mayor fails to take real ownership of air quality issues, and instead tends to pass responsibility for driving action to national Government and the London Boroughs. Solutions to air quality problems are frequently complex and require multi-agency solutions to implement them. However, ultimately one organisation needs to take ownership of the problem, and provide the drive and leadership necessary to implement successful measures. The Mayor is in an ideal position to do this for London, as he provides a key link between national Government, the London Boroughs and delivery bodies such as Transport for London. Unfortunately we see little commitment to solving London's air quality problems within the strategy, and scant evidence of leadership.

The UK Government is currently waiting to hear from the European Commission about the outcome of its application for a time extension for meeting EU PM_{10} limit values. Under the conditions of the EU Air Quality Directive (2008/50/EC) the application must demonstrate how remaining PM_{10} exceedances (which are concentrated in Greater London) will be tackled, in order to gain the time extension. We believe that the lack of commitment and quantifiable action within the draft

Mayor's Air Quality Strategy greatly undermines the eligibility of the UK's application for a PM_{10} time extension in the London zones, and we have written to the Commissioner for Environment to express our views (a copy of this letter is enclosed with this response).

We understand that the strategy document represents a first draft, and that the Mayor's team will be working with their partners in the functional bodies to produce a revised and improved document for full public consultation. We hope you find our comments useful, and urge you to include far greater commitment and substantive action in the next draft.

3 - Detailed Comments

We have detailed our comments below on each of the twelve policy areas put forward in the strategy document:

Policy 1 – Encouraging Smarter Choices and Sustainable Travel Behaviour

Changing travel behaviour, patterns, and logistical operations is an essential partner for technical solutions in dealing with both air quality problems and CO_2 emissions. We therefore support the actions described under policy 1. However, most of these actions are long term (changing behaviour in particular can be a long term issue without substantive accompanying 'hard' measures), lack a properly quantifiable impact and are unlikely to contribute significantly towards the near-term problem of compliance with EU limit values.

Many of the actions in this section are already in operation in parts of London and beyond. In London Smarter Travel Sutton[1] (funded by Transport for London) has demonstrated significant reductions in single occupancy car journeys, results which have been mirrored in other towns and cities across the UK by Sustrans pioneering TravelSmart[2] personalised travel planning initiative. In addition to this, 'traditional' travel plans are often required as part of planning conditions negotiated by local authorities. Car clubs are widespread across London, and well used by many residents. Environmental Protection UK has discussed many of these exciting initiatives with their organising bodies and, whilst the achievements have been impressive, little information is available about the quantified impacts on air quality.

There is considerable potential for rolling out smarter choices, car clubs and eco driving schemes to cover more individuals and organisations in London. Funding is, however, often an issue – even schemes such as car clubs, which are commercial operations, often require seed funding. We do not see evidence of any new funding being committed to these types of activities within the draft strategy document.

The final action under policy 1 'providing the right information to the public' is a very important one. Providing information to the public about the impact of their transport choices can help secure long-term improvements in air quality and other environmental impacts. However, currently the public perception of environmental impacts is dominated by a single metric, CO_2 emissions, a situation entrenched by national programmes such as 'Act on CO_2' that do not consider any other environmental impacts, such as air quality. The Mayor's strong voice here would do much to ensure that future public information campaigns take a broader view of

[1] See - www.smartertravelsutton.org
[2] See - www.sustrans.org.uk/what-we-do/travelsmart

environmental impacts, and we would like to draw your attention to vehicle environmental guides produced by organisations such as the US Environmental Protection Agency[3].

Recommendations

- That the Mayor leads further research to better quantify the air quality impacts of measures such as travel planning, car clubs and eco-driving
- That the Mayor confirms funding for a large rollout of 'smarter choices' style schemes across London
- That the Mayor introduces London wide public information campaigns to raise awareness of air quality issues, and pushes central Government to encourage a broader range of environmental impacts to be considered in future transport related public information campaigns

Policy 2 – Promoting Technological Change and Cleaner Vehicles

The Mayor's vision of cleaner, electric vehicles dominating in London is an admirable one, however he should not underestimate the challenge and likely timescales of affecting a major change in vehicle technology. We believe electric vehicles are likely to have a negligible effect along the timescales needed to ensure compliance with European air quality directives.

Internal combustion engine technology is strongly entrenched due to the range of vehicles available, established infrastructure and public familiarity. Electric vehicles by contrast are very few in terms of the models available, suffer from a lack of supporting infrastructure and compare badly with the public in terms of familiarity, range and sophistication. Niche markets such as central London will lead changes in technology, however change is likely to be slow and gradual. The worked example on page 36 is extremely unlikely to take place in the suggested timescale.

To conclude here, we strongly support the Mayor's actions to encourage electric vehicles, but do not believe they will have an appreciable effect on air quality in the short and medium terms.

Policy 3 – Targeting Air Quality Hotspots Through a Package of Localised Measures

Whilst localised measures will have a strong part to play in improving London's air quality there is very little of substance within this section of the strategy. It is very difficult to get any idea of what the quantified benefits of these local packages would be, and how they would affect compliance with EU limit values.

The suggestion of assigning the cleanest buses to routes that pass through areas of poor air quality is an interesting one, however it is only likely to be effective where buses are the major source of pollutant emissions, and the current fleet of buses on the route is relatively old and dirty. There is also a risk that emissions are simply displaced to other parts of London, and in the case of 'no safe threshold' pollutants such as particulates the overall effect on public health is likely to be neutral. Other traffic management measures may have similar effects – the risk of routing traffic away from polluted areas is that the health impacts are simply moved somewhere else.

[3] See EPA Green Vehicle Guide - www.epa.gov/greenvehicles/Index.do

Improving street vegetation is desirable on a number of grounds – trees and other vegetation can help to improve the living environment. The effect of vegetation on air quality is however, unproven, and if the wrong type of vegetation is planted there is some evidence that air quality could even be negatively affected. Whilst we support this action in principle, we do not have confidence that it will significantly improve air quality.

We very much welcome the Mayor's continued opposition to a third runway at Heathrow, and agree that the environmental impacts of this would be unacceptable. We do, however, continue to oppose the Mayor's proposals to scrap the Congestion Charge Western Extension. The congestion charge has been a successful tool for reducing the amount of traffic in the affected areas, and has also helped to drive the accelerated adoption of alternative fuel vehicles. Removing part of the congestion charge zone will make the challenge of achieving air quality targets that much harder. We have also reacted with concern[4] to suggestions that the congestion charge is to be linked to vehicle CO_2 emissions, as linking charges to such a narrow metric can encourage dirtier, noisier diesel vehicles in the most congested areas of London.

Recommendations

- That the Mayor reconsiders his decision to scrap the Congestion Charge Western Extension, and includes both air quality and climate change criteria in any review of the congestion charging system.

Policy 4 – Reducing Emissions From Particular Sources in the Public Transport Fleet

In many parts of London emissions from public transport dominate, and, as the strategy makes clear, it is therefore important to take actions to reduce emissions from this sector. Public transport is a sector where major changes can be effected through working with a relatively small number of operators and, in the Mayor's case, one where he has a direct control of much of the fleet through Transport for London. We have set out our thoughts on each of the transport sectors below.

Buses

Changes in bus technology and retrofitting of the existing fleet are, as identified, key to cleaning up the sector. We feel however that the Mayor has missed one particular cost effective technology that could assist here – gas (compressed natural gas or biomethane) buses. Unlike diesel (even hybrids) gas buses are an inherently clean technology, and tailpipe particulate emissions are very low. Gas buses can be run on biomethane – natural gas produced from the decomposition of organic waste. Using biomethane can also enormously reduce emissions of CO_2. Many cities across the world[5] use gas buses successfully, and several use biomethane. It is surprising that London has not considered this technology further, especially considering how some other technologies mentioned here (for example fuel cells) are far from commercialisation, meaning an interim technology is needed.

We support the retrofitting of older buses to Euro IV standards, but feel the 2015 timeline suggested is under-ambitious considering the pressing need to meet EU air quality limit values.

Taxis and PHVs

[4] Please see our letter to the Mayor of 6th August 2009
[5] See www.biomethane.org.uk for examples

The Mayor's Taxi Emission Strategy was a pioneering document, and we fully support efforts to strengthen it. Again though, we feel that the proposed actions are under-ambitious considering the urgency of the problem. For example, we urge you to introduce a requirement that all new vehicles entering the fleet after 2012 are Euro 5 standard, rather than Euro 4, as this would ensure that all of these vehicles were equipped with a particulate filter. A 15-year age limit for taxis in 2012 is also under-ambitious and, as all taxis are now required to meet the Euro 3 standard, will have no effect on air quality. An early commitment to requiring Euro 4 compliance across the taxi fleet is required to bring forward a significant step change in emissions from his sector.

Rail

Emissions from diesel railway engines have been overlooked in the past, and it is encouraging that the Mayor is looking to reduce these. Measure such as electrification are, however, relatively long term, and unlikely to have much impact in the timescales needed to meet EU air quality limit values.

Recommendations

- That the Mayor instructs Transport for London to investigate CNG/ biomethane buses as a suitable bridging technology to a future commercialisation of fuel cell vehicles
- That taxi standards be raised to Euro 5 standard for new vehicles entering the fleet after 2012, and a new commitment to Euro 4 compliance across the fleet is introduced as soon as possible.

Policy 5 – Emissions Control Schemes

Low Emission Zones (LEZs) are a crucial tool for improving air quality and, along with incentives for cleaner vehicles and retrofit of older ones, LEZs are the main proven, practical means of meeting EU limit values. The London LEZ was a pioneering and successful scheme, however we believe that a number of 'inner' LEZs with more demanding standards are now necessary if London is to stand any hope of complying with the EU limit values. Experience from Europe, particularly Germany, demonstrates some innovative, low cost methods for how these inner LEZs may be implemented[6].

Unfortunately the actions listed under this policy in the document show only partial support for the strengthening of the LEZ system. We have previously voiced our disappointment about the Mayor's decision to delay or scrap phase 3 of the existing LEZ. The delay in implementation proposed in this draft strategy is a major disappointment, and will have a significant negative impact on public health and compliance with EU limit values. Phase 3 of the London LEZ was one of the key measures included in the UK's application for a PM_{10} EU Limit Value time extension, and in order to play its full part here Phase 3 needs to be in place, at the very latest, by June 2011.

The Mayor's proposals to support a national certification and testing scheme for NO_x retrofit equipment is very welcome, as is his support for a national LEZ framework. London is perhaps the only city in the UK with the size and status to lead these very necessary actions, and leadership from the Mayor would be a great assistance here. However, the language used in this section needs to be strengthened – simply 'working in partnership' with national Government is not enough, real leadership is needed.

[6] See www. lowemissionzones.eu

As we outlined above, we believe that additional inner Low Emission Zones will be needed to effectively tackle London's air quality problems, perhaps based on a simple, low cost model such as the German example. We are therefore disappointed that there are only weak commitments within the strategy to the concept of inner LEZs, with the decisions being pushed into the future and largely delegated to the London Boroughs. If we are to have any hope of meeting EU limit values preliminary actions to establishing inner LEZs are needed now, and the Mayor must take a strong lead, as was the case with the current London wide LEZ. The establishment of inner LEZs is not at all suited to the London Boroughs – the likely shape of inner LEZs will range across Borough boundaries, and a piecemeal approach is likely to lead to a fragmented, chaotic regime that will greatly hamper compliance.

Recommendations

- That the Mayor urgently reconsiders his proposals to delay implementation of Phase 3 of the current LEZ
- That the Mayor urgently begins work with national Government to establish a national LEZ framework, and a certification and testing scheme for NO_x abatement
- That the Mayor commits to leading the development of 'inner' LEZs, rather than devolving responsibility down to Borough level.

Policy 6 – Air Quality Action Days and Special Measures

The actions proposed in this section are vague and undefined, and it is therefore difficult to come to any conclusions about how they might affect London's air quality. 'Special measures' such as restrictions on which cars can travel into the city on a particular day are unlikely to be politically acceptable in London, and potentially undermine certainty for businesses and individuals.

Encouraging cycling in the capital is a laudable aim, and shifting a significant number of journeys from motorised transport to cycling would have considerable public health benefits. Changing attitudes to cycling will take some time though, and evidence tends to suggest that people are more likely to switch from public transport to cycling, rather than from the private car. Encouraging cycling is therefore unlikely to have a significant impact on air quality in the short to medium term.

In view of the undefined nature of this section we will reserve detailed comments until more substantial policy suggestions are available.

Policy 7 – Reducing Emissions From Construction and Demolition Sites

The London Best Practice Guidance discussed in this section was a landmark document. We were heavily involved in the preparatory work for the guidance through the work of our PRECIS (Partnership in Reducing Emissions from Construction Industry Sites) group. Like the Mayor we are concerned that the BPG has not been fully implanted across London, and we commend these suggestions to speed its implementation, and develop the guidance further in coming years.

Policy 8 – Better Use of the Planning Process
The work of the Low Emission Strategies (LES), Partnership[7], and pioneering local authorities such as the London Borough of Greenwich, has helped to demonstrate how new development and work to improve air quality can be combined. It is encouraging to see the Mayor take up these themes in this section, and we strongly support the proposal that all development in London should be 'air quality neutral'.

We have undertaken a significant amount of work on the air quality impacts of biomass combustion over the past two years, and have produced guidance for local authorities in partnership with LACORS[8]. The proposed block on biomass boilers under 500 kWth is sound, and we support this with the proviso that it is kept under review to ensure it reflects the current technological situation. However, the condition included within this proposal 'unless they can demonstrate that they have no adverse effects on local air quality when compared with conventional gas fired boilers', is likely to prove ambiguous in practice. Biomass is an inherently dirtier technology than natural gas, and it is extremely unlikely that a small (<500 kW) biomass boiler will achieve lower particulate emissions than an equivalent gas boiler. The impact of a single biomass boiler on local air quality is, however, small and could be demonstrated by modelling to have 'no adverse effects', but the cumulative effect of many biomass boilers may be significant. We suggest that the wording of this proviso should be changed to 'unless they can demonstrate equivalent or lower emissions than a conventional gas fired boiler'.

There is a significant policy tension between local renewable energy targets (or 'Merton Rules') and restrictions on biomass on air quality grounds. Biomass is often one of the few suitable technologies for space constrained city development sites. Local authorities currently have no tools for directing renewable energy provision 'off site', or pooling developer contributions to fund large renewable energy installations.

One potential incoming tool that local authorities may be able to use in this case is the forthcoming Community Infrastructure Levy (CIL), which was recently the subject of a consultation by the Department for Communities and Local Government (CLG). CIL could potentially be used to pool developer contributions towards renewable energy installations to, for example, allow a local authority to fund a large biomass combined heat and power system in a suburban location. There is, however, the possibility that CIL could also negatively impact on the ability of local authorities to impose conditions on developers to fund 'air quality neutral development', or Low Emission Strategies. Both of these issues are explained in more detail in our response to the CIL consultation[9], and we urge the Mayor to engage with CLG to ensure that these issues are considered in their thinking as they finalise the structure of CIL.

Policy 9 – Energy Efficient Buildings
Energy efficiency is an intelligent choice for both improving air quality and reducing greenhouse gas emissions. We fully support the actions laid out in this section. We are particularly pleased to see the idea of a boiler scrappage scheme floated here – since high efficiency boilers became mandatory under building regulations there have

[7] See - www.lowemissionstrategies.org
[8] Biomass and Air Quality Guidance for Local Authorities (England and Wales), see www.environmental-protection.org.uk/biomass/
[9] See - http://www.environmental-protection.org.uk/assets/library/documents/EPUK_CIL_Response_221009.pdf

been few incentive schemes available to replace old gas boilers with new ones, despite the considerable CO_2 and NO_x benefits available through bringing forward the replacement of these boilers. A scrappage scheme would bring considerable benefits nationally, but especially in London where emissions of NO_x from gas boilers are very significant.

Policy 10 – A Less Polluted Public Realm

We strongly support actions to create a greener city, however the air quality benefits of planting vegetation remain unclear. Projects such as the Dutch IPL[10] study are helping to improve our knowledge here, but it is unlikely that vegetation will make a significant impact on air quality within the timescales for compliance with EU limit values.

Waste burning causes air pollution as well as nuisance issues; bonfires and associated issues are one of the main themes of enquires from the general public to Environmental Protection UK. Greater powers for local authorities to restrict the burning of waste are to be supported – we would also raise the issue of people burning waste in internal fireplaces and wood burning stoves, this is largely a matter of education, awareness and enforcement that we will return to in Policy 12.

Policy 11 – Encouraging Innovation

London has previously been a centre of innovation for action on air quality, and has acted to disseminate best practice to the rest of the UK and beyond. As the UK's largest city, and the city that suffers the UK's worst air quality problems, it is essential that London continues to act in this role. The Mayor's support for innovation is therefore very welcome.

The language in this section of the strategy is, however, vague and weak. On page 70 the Mayor will 'seek to ensure' that the LAEI and air quality monitoring networks are maintained and enhanced rather than 'ensure', whilst on page 71 the Mayor will 'consider' the creation of an air quality innovation fund rather than commit to it at this stage. The actions under this policy therefore give an indication of the Mayor's intentions, but no clear commitment to any actions. We hope that greater commitment is provided in future drafts of the strategy.

Biofuels are a mentioned in this section, however biomethane for buses and HGVs are not covered. We discussed the advantages of CNG/ biomethane vehicles in our comments on Policy 4, and it would be very useful for the Mayor and Transport for London to look at this technology in detail.

Policy 12 – Raising Public Awareness and Encouraging Behavioural Change

Raising public awareness is a key area of work, both to engage the public with the air quality issue and also to justify the physical measures that are implemented. This is particularly necessary at the current point in time, as the public perception of environment is increasingly focused on climate change. The issue of broader environmental impacts needs to be communicated in a way that does not dilute the importance of climate change.

However, awareness raising by itself rarely leads to significant shifts in technology or behaviour, and public information campaigns need to be implemented alongside

[10] See - www.ipl-airquality.nl

other 'hard' measures to have a noticeable effect. The new central information website mentioned in the strategy is a welcome development, however it would be useful to tie this in to existing websites covering air quality in London (such as www.londonair.org.uk and www.airtext.info) to ensure that it does not simply cover the same ground as existing web resources.

Wood and waste burning at domestic properties has been a particular area of concern for many air quality professionals in recent years, a situation exacerbated by the promotion of wood burning as a 'green' fuel and high market prices of traditional fuels such as gas and electricity. Good practice for using solid fuels and the legalities of the Clean Air Act are not generally well understood by the general public, or even installers and retailers of wood burning equipment. Organisations such as Environmental Protection UK have provided basic web based advice[11], however it would be very useful for the Mayor to back a full awareness campaign aimed at installers, retailers and the general public.

The airTEXT scheme in London has been a tremendous success – although this is not a service that actively improves air quality, it has been an innovative tool to help vulnerable individuals manage their exposure to polluted air. Whilst the Mayor's support for the scheme is welcome, the draft strategy does not suggest financially supporting continuation of the system, which is a disappointment. The Department of Health is unlikely to provide complete funding for the system, and additional funding will be needed from the Mayor is needed if this excellent system is to continue.

Recommendations

- That the Mayor leads a public information campaign to raise awareness on best practice and legal issues with domestic wood and waste burning
- That the Mayor provides direct funding for the airTEXT scheme.

4 - Contact Us

If you require any further information on the views expressed in this response please contact:

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[11] See www.environmental-protection.org.uk/air-quality-and-climate/air-quality/solidfuel/