The Association of Directors of Public Health

Improving air quality: reducing nitrogen dioxide in our towns and cities

The Association of Directors of Public Health (ADPH) is the representative body for Directors of Public Health (DPH) in the UK. It seeks to improve and protect the health of the population through collating and presenting the views of DsPH; advising on public health policy and legislation at a local, regional, national and international level; facilitating a support network for DsPH; and providing opportunities for DsPH to develop professional practice.

The Association has a rich heritage, its origins dating back 160 years. It is a collaborative organisation working in partnership with others to maximise the voice for public health.

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?**

ADPH welcomes the publication of the plan and that the government is committed to tackling air pollution. We were pleased that the plan identified roles for a range of system partners; however, we do not feel the plan represents a truly joined-up approach and much of the burden for tackling air pollution is placed on individual local authorities. We are also concerned by how little health features in the proposed plans as air pollution is one of the greatest public health issues faced by the UK. There are no safe limits of particulate matter (PM) below which no adverse health effects would be expected to occur.

Air pollution does not respect local authority boundaries and the plan does not allow for air movement. The plan should take a whole system approach and make more reference to the need for multi-sector working across transport, planning, health and education at the local, regional and national levels. We would also like to see reference made to the synergies with other government strategies for example the Department of Transport's Cycling and Walking Investment Strategy, which we strongly welcomed.

Most of the measures contained within the plan are designed to increase existing mitigation activity rather than constitute new actions. There is a lack of specificity and the plan does not adequately consider the significant impact on air quality that can be achieved through national initiatives and through supporting the take-up of walking, cycling, public transport and low emission vehicles. There is an over-reliance on Clean Air Zones (CAZs) which may be a useful lever for change but if used in isolation they risk simply moving the problem rather than solving it.

The document outlines that the government has evaluated 60 different potential options to achieve compliancy and has assessed them all in accordance with the standard treasury methodology against three success factors: air quality impact, timing to impact and deliverability with five other factors considered: costs incurred by central Government, costs and benefits of wider societal impacts, impact on greenhouse gases, strategic fit and the impact in terms of future economic growth. We would have liked to have seen public health included on this list of considerations.

There are many examples of innovative and effective solutions being implemented internationally and much could be learned from fostering closer partnerships with other countries on this issue. We would also have welcomed the inclusion of best practice examples from local authorities in England many of whom are already working hard to mitigate negative air quality impacts while increasing levels of active travel and creating healthy environments.

There needs to be a cross cutting review of the implications of the any suggested actions in the plan so there are no unintended health, health inequalities or environmental impacts. Formal evidence-based evaluations will support shared leaning and reduce the risk of waste and inefficiency.

Although nitrogen dioxide is the focus of the document it should be considered within the wider context of causes of emissions e.g domestic wood burners and boilers. Furthermore, nitrogen dioxide is not the only air pollutant that impacts negatively on health; other pollutants need to be considered and reduced.

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?**

The framework was originally consulted on in November 2016 and ADPH responded to this. ADPH's key requests were as follows:

- Air pollution should be tackled on a national scale in a holistic way and central government needs to support the take-up of low emission vehicles.

- National schemes need to support wider change including initiatives such as Vehicle Excise Duty which reflects the impact of diesel vehicles on air pollution, a vehicle scrappage scheme or coloured stickers showing the emission group of a private vehicle

- Areas should be free to decide some measures based on local need, giving them the freedom to innovate, drive change and share learning

- Areas should be encouraged to implement multidisciplinary Clean Air Zone implementation groups including public health, environmental health, transport, planning, voluntary sector and public and commercial representation

- Long term schemes will need to consider the inclusion of private cars; the option to implement Clean Air Zones that extend to private cars, motorcycles and mopeds should be clearly given

- Taxis may need additional support to facilitate retro fitting and local areas may need to adjust for a longer implementation period for these vehicles

- Revisions to the minimum vehicle standards could be considered earlier than 2025 in the event of advances in vehicle technology or changes in health evidence

The plan allows CAZ exemptions to be set at a local level and allows flexibility over timing. Overall this is positive but it will create some challenges for businesses and individuals driving between different CAZs if there are different time limits and exemptions in place and for the authorities concerned in signing and presenting such variations. Local authorities are likely to come under pressure from different groups to provide exemptions but the level of exemptions granted must be kept to a minimum if compliance is to be achieved.

When considering the impacts on business, local authorities should be sure to review the benefits to local business when measures that promote walking and cycling are implemented. The costs to businesses also need to be compared with the costs of not acting to reduce the use of motorised vehicles e.g. loss of productivity from staff sickness and absenteeism secondary to air pollution such as asthma, exacerbation of COPD and the impacts of obesity and type II diabetes on staff health which are partly driven by physical inactivity and sedentary lifestyles. Evidence suggests that those people who cycle to work take fewer days of sickness leave compared to those who do not, for example. People who arrive on foot are more likely to spend more money when visiting the local high street than those who arrive via car. The economic costs of congestion need to be considered (as do the costs of congestion on mortality).

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? 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 to maximise value for money, target support where it is most needed, reduce complexity and minimise scope for fraud?

Interventions to tackle air quality should be designed so that there are also clear benefits to the health of the population (co-benefits). These could include increasing physical activity and improving social connectivity and reducing social isolation, noise pollution, traffic injuries and community severance. Prioritising initiatives that maximise the benefits to both population health and the environment will represent best value for money for local authorities as well as having a greater positive impact overall.

The new plan states that the solution determined by a local authority must consider the economic and social impact - but gives no guidance or suggestion as to how this can be achieved. This is also the case in terms of how to handle displacement of emissions to other areas with the local authority and neighbouring authorities. Some guidance or steer from national government is required.

The plan refers to the following further work being undertaken which needs to continue and be funded correctly:

- Exploring changes to taxation (treasury to assess changes to vehicle excise duty, fuel duty and company car tax to create incentives towards less polluting vehicles)
- New mandatory emissions standards for non-mobile machinery (i.e. construction)
- Policy changes related to the use of red diesel in urban areas
- Funding for new junctions to help traffic flow
- Examination of impact of traffic calming where this might negatively affect air quality

Mitigation can also take place through the structure of the built environment by placing health at the centre of planning and transport policies, particularly in urban environments. Research indicates that the approach to city planning with the greatest potential to produce the largest health benefits is one where walking, cycling and public transport are supported by a safe infrastructure and given prioritisation over private motorised forms of transport. Wider pavements, trees and street furniture between footpaths and roads, and safe cycling infrastructure such as dedicated cycle lanes can all have a positive impact. We welcome the £300m investment from government as announced in the Cycling and Walking Investment Strategy. Investment to encourage active travel and improve public transport networks is vital for tackling air pollution.

The government should commit to a cost-benefit analysis of a national diesel scrappage scheme.

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

Interventions can be evaluated by longitudinal studies on local AQ/PHOF profiles There needs to be a greater emphasis on partnering with academia to evaluate the impacts. There also needs to be greater recognition of the need for research and evidence to be translated into policy.

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

Essential vehicles and public transport vehicles should be prioritised for retro-fit schemes. For example – taxis, buses, HGVS, and refrigeration units on LGV and HGVs.

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

There needs to be greater communication with the public about the potential health impacts of choosing to commute via car in comparison to by active travel.

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

The technical report indicates that the national model has a +/-30% level of accuracy which indicates improving air quality is not an exact science. In the executive summary, it indicates that local evidence will be considered. This could be positive as there are some disparities between the national and local model.

Technical innovations focusing on public transport information and payment systems, for example, on street bus arrival updates and initiatives like the oyster card, that support increases in the uptake of active travel should also be prioritised.

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

The report seems to distance the government from the decision that a CAZ is required in an area - however, once a local authority has determined the quickest route to compliancy the government will mandate them to implement their identified measures. This seems to be inconsistent use of localism.

Initiatives to communicate with the people of the UK regarding the scale and nature of the changes needed to address air pollution are critical. The government needs to lead on this communication agenda and support local authorities to have these discussions at a local level.

We would welcome more consideration of the needs of port cities. The consultation document does not outline any new regulatory tools for a local authority to make use of to address air quality from port activities. The balance between supporting public health and ensuring economic growth can be difficult to strike when ensuring port activities are less polluting.

There is a need for national and international changes in regulation to reduce risk. Without the ability to stipulate the need for cleaner fuels locally there is no leverage for the authority. Equally, without a nationally defined approach for the generation of shore side electrical energy including agreed international standards for the generators and the regulatory requirement for all ports to make sure this infrastructure is put in place, individual UK ports have no driver, and/or commercial basis for investing significant sums of money into the infrastructure. National government needs to take a clear lead to enable a step change in the shipping industry. Common emissions standards for non-road based transport shouldn't be excluded from the Government's National Air Quality Plan.

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June 2017