

## Consultation: Draft Air Quality Plans

### Response from Green Alliance

#### Background

*This consultation response is based on the Parliamentary Nexus project, funded by the Economic and Social Research Council (ESRC). The project is a collaboration between Green Alliance, King's College London and the Grantham Institute at Imperial College, to examine approaches to decision-making on so-called 'Nexus' challenges: issues such as food, energy and water which are characterised by coupled human-environment systems, complexities and feedbacks.*

*As part of the project, Green Alliance convened a workshop in Parliament to bring together representatives from academia, MPs from across the parties including the Chairs of the Efra Select Committee and the Environmental Audit Committee, senior air pollution experts and representatives from local councils.*

*This consultation response reflects and reports on the workshop but does not necessarily represent the views of all those present.*

#### The need for a strategic response to air quality

***Relating to consultation question Q1, do you consider that the proposed plan set out in the overview document strikes the right balance between national and local roles?***

Air pollution is a major environmental and health hazard. There is substantial scientific evidence on the adverse effects on human health and the environment from various airborne pollutants<sup>i</sup>, and growing evidence of negative health impacts from chronic exposure to lower, legally allowable concentrations of pollutants<sup>ii</sup>.

The UK is not the only country struggling to comply with limits on NO<sub>x</sub> and PM. Road traffic is a major source of both NO<sub>x</sub> and PM and right across Europe the vehicle fleet has shifted from cleaner burning petrol engines to diesel ones, which offer better fuel economy and were actively promoted in an effort to reduce greenhouse gas emissions and combat climate change. In the process, however, these policies exacerbated problems with local air quality.

Such complex interdependencies are a hallmark of 'nexus' issues involving coupled human-environment systems. In such coupled systems, efforts to improve sustainability in one policy domain can prove counter-productive if they do not consider their effects on other policy domains with which they are inter-connected. Thus the carbon emission reducing shift from petrol to diesel vehicles, developed as part of national climate strategies and promoted through associated tax and transport policies, had far reaching consequences for local air quality and environmental health, which were overseen by different policymakers working across different sectors in a multilevel governance system. Nexus thinking highlights these interdependencies and promotes more integrated approaches that move beyond sectoral, policy and disciplinary silos.

The parliamentary workshop identified the clear need for a more strategic look at air quality. The last comprehensive plan was published back in 2007 and while Defra's current consultation and draft

plans are welcomed, they deal with one particular aspect of a much greater issue. An updated, comprehensive strategy on air quality would be extremely timely and should set out a clear national approach to how air quality will be improved in the long-term and what responsibilities and support local authorities will have. Such a long-term national strategic outlook on air quality could also make helpful links to climate change and UK's carbon commitments and how the two issues can be dealt with simultaneously.

### **Air quality limit values**

European air quality limit values exceed standards for the protection of human health set by the World Health Organisation (WHO), and even if met health risks would remain. Recent evidence for health effects from direct exposure to NO<sub>2</sub> emphasizes this. Furthermore the setting of EU emission standards for NO<sub>x</sub> emissions has been based on artificial tests, resulting in real world emissions from new diesel cars well above the standard (of 0.08 g/km). Even when more realistic "real-world testing" is introduced, agreement on emissions with the motor manufacturers is still likely to exceed the original limit set for diesel cars, making attainment of NO<sub>2</sub> limit values at road-side locations very difficult to achieve. Moreover no attention is given to restricting the primary NO<sub>2</sub> component of NO<sub>x</sub> emissions which is much higher for diesel cars. A thorough rethink is needed on the setting of both air quality limit values, and on emission standards in order to meet them.

### **Working across departments and sectors**

There is a clear need for a cross-departmental approach to air pollution since its causes and effects span right across the responsibilities and policies within the Department for Environment, Food and Rural Affairs, the Department for Transport, the Department for Health, and the Department for Energy and Climate Change. Improved cross-departmental communication and approaches to air quality would allow for the incorporation of air quality across multiple policy areas and would allow for a more holistic and wider strategic approach on air pollution. This would include:

- The agricultural sector, given its role in emissions of NH<sub>3</sub> in particular
- Construction (including non-road mobile machinery) and housing
- Land-use planning, to encourage walkable settlements, reducing transport-related emissions
- Wider transport policy, including efforts to support active travel, such as walking and cycling
- Health policy, and particularly efforts to reduce the effects on vulnerable populations such as younger and older people.

A particular need was identified to improve data availability, making it accessible to all. This could translate into ultra-local mitigation strategies around schools and residential areas, for example. A long-term strategic plan on air quality needs to be linked to better short-term, local responses to air pollution.

### **Successful approaches to Nexus issues: Examples from elsewhere**

The workshop highlighted a number of areas where such a strategic approach to policy had been taken. The Climate Change Act, for example, sets a long-term strategic target, with shorter-term milestones, and provides a framework for specific policies on carbon reduction, bringing together relevant Government departments. At a local level, Westminster City Council has a Greener City

Action Plan, setting out a ten-year vision for maintaining and improving the environment, and providing a framework for individual policies to reduce air pollution, such as preventing engine idling.

Both these examples highlight the benefits of linking across sectors and issue areas, linking between short-term and long-term goals, and different levels of government.

## The role of local authorities

### **Relating to:**

***Consultation question Q1, do you consider that the proposed plan set out in the overview document strikes the right balance between national and local roles?***

***Question Q5, What do you consider to be the barriers that need to be overcome for local authorities to take up measures set out in section 4 of the UK overview document? How might these be overcome? Are there alternative measures to avoid these barriers?***

As discussed above, local areas would benefit from an improved national strategic view, and clear communication between national and local levels.

An example is the introduction of electric vehicles, which would benefit from a co-ordinated national strategy to help with the provision of infrastructure at the local level. The need for improved communication with businesses was also voiced, to ensure that they understand and act on air pollution.

In some areas, national government sets very specific restrictions on local policy. For example, the limit on fines for engine idling is £20, which does not work as a deterrent. Within the context of a clear national framework, local authorities would like the flexibility to test new approaches, such as charging for parking according to emissions, and restricting diesel engines in certain areas.

Participants noted that longer-term solutions to air pollution depend upon reducing car use and developing better infrastructure for public transport, cycling and walking. Although these solutions are highlighted in the government response, there is a need to ensure that transport and planning policy at a national level allows and encourages such solutions to emerge at local level.

Concerns were expressed that the draft air quality plans place considerable responsibilities on local authorities at a time of considerable financial austerity, with little information on how proposed measures will be financed.

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<sup>i</sup> Particulate matter (PM<sub>10</sub>; PM<sub>2.5</sub>), nitrogen oxides (NO; NO<sub>2</sub>), ground-level ozone (O<sub>3</sub>), and volatile organic compounds (VOCs) are the major concerns in the UK today. Accessible summaries of the evidence-base are available from J. Wentworth (2014) [Ambient Air Quality](#) POSTnote 458, Parliamentary Office of Science & Technology, London; Natural Hazards Partnership (2015) [Air Pollution](#), NHP Science Note.

<sup>ii</sup> WHO (2013) Review of evidence on health aspects of air pollution. Copenhagen: World Health Organization