

## Department for Environment, Food and Rural Affairs

### Clean Air Strategy 2018

#### Background to CIWEM

CIWEM is the leading independent Chartered professional body for water and environmental professionals, promoting excellence within the sector. The Institution provides independent commentary on a wide range of issues related to water and environmental management, environmental resilience and sustainable development.

CIWEM welcomes the opportunity to respond to DEFRA on its consultation on the Clean Air Strategy 2018. This response has been compiled with the assistance of our members and our Air Panel.

#### Summary

- Air pollution causes 40,000 premature deaths each year, and dramatic and ambitious action is vital in order to improve air quality and avoid this.
- CIWEM welcomes the government's commitment and focus on clean air, and the ambition to reduce air pollution. However, there is insufficient detail on a lot of the actions contained within the Clean Air Strategy to be able to evaluate whether they are likely to be successful.
- More investment in research and public engagement is vital, with a particular focus on encouraging active transport.

#### Response to consultation questions

##### Chapter 1: Understanding the problem

1. 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.

CIWEM welcomes the commitment to investment £10million in improving modelling, data and analytical tools, as investment in this area is crucial to understand the impact of air quality on health and the environment. However, there is no detail on what this investment will be spent on. Data and monitoring must be standardised across national and local authority networks, as the Strategy states 'these different data sources require careful interpretation due to variability in data quality, location and technology type'. A standardised method would make the data more meaningful, able to be analysed effectively, and cross-compared.

Air quality is a wide-ranging issue, and any Strategy to improve it must be a truly integrated one across the Government, implemented with a cross-departmental approach, including, but not limited to, Defra, Department of Health and Social Care, Department for Transport, and Department for Business, Energy and Industrial Strategy.

2. 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?

Accessibility of evidence on air quality is vital for scientists as well as the general public to be well-informed on the forecast and health impacts. The National Atmospheric Emissions Inventory website has an abundance of detailed information, but it could be made more accessible for the wider public who have limited scientific background knowledge. The data and reports could be translated into an easily digestible inclusive format or briefing.

The UK-Air website is a very valuable tool with a wealth of useful, practical and helpful information for the general public about the air quality forecast and the associated health impacts. However, it is not widely advertised, and the vast majority of the public would not know it exists. Wide-spread sharing of this resource would enable the public and other interest parties to engage with air quality issues in a practical way and learn to protect themselves from the impacts.

## **Chapter 2: Protecting the nation's health**

3. 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.

We comment on the proposed new powers of the statutory body in the questions in Chapter 9 on leadership.

There is little detail in the Strategy about the package of actions in this Chapter. For example, there is no information on the 'comprehensive set of new powers designed to enable targeted local action in areas with a pollution problem', what powers these are proposed to be, and which bodies they will be granted to.

The information on the action to develop and deliver a personal air quality messaging system to inform the public about the air quality forecast, information on air pollution episodes and health advice is too lacking in detail to evaluate. Any new system should not replicate existing tools, for example the London Air Quality Network website run by King's College London. It will require a large amount of investment, of which it is not clear there is a commitment to, and it needs to have a purpose over and above existing systems.

Very localised information is vital for an air quality system to be purposeful, and it is unclear how this would be managed. It needs to be accessible to all, as not everyone will, or have the means to, download a phone based-app for example,

especially the elderly who are some of the most vulnerable to the impacts of air pollution. Those most likely to engage with a messaging system are likely already engaged with air quality and issues surrounding it. It is important to design a system which can offer people practical and useful information and establish how it can target those who would otherwise not have sight of such information.

CIWEM welcomes the commitment to reduce PM<sub>2.5</sub> levels in order to meet the World Health Organisation (WHO) suggested targets. However, the messaging is confused. The target is to “halve the number of people living in locations where concentrations of PM are above 10 µg/m<sup>3</sup> by 2025”, but it is unclear which people will no longer be exposed. It is likely that deprived communities (as described in section 2.1) will still be exposed disproportionately. There is also a lack of specific detail about how PM<sub>2.5</sub> exposure will be reduced, and a stark lack of target beyond this one for 2025, to reduce the amount of the population living in such locations further than 50%. It’s important to note that despite issuing guideline limits, the WHO state there is no safe level of PM<sub>2.5</sub> and that no threshold has been identified below which no damage to health is observed<sup>1</sup>.

4. How can we improve the way we communicate with the public about poor air quality and what can people do?

CIWEM advocates that messaging should be targeted at the causes of pollution, as well as what the public can do to improve air quality. Raising awareness of these issues is essential to efforts to improve air quality.

Communication with the public to educate on how individuals can change their behaviour to improve air quality, and also to educate on what individuals can do to protect themselves better from the impacts of air pollution would be an effective tool.

Investment in active transport is key. Active transport messaging should be widespread and be backed up with investment in initiatives to encourage walking and cycling.

Air quality and its impact could be included in the primary school curriculum. Early engagement with young people is likely to lead to them making improved choices later in life and is a useful way of engaging with parents who might otherwise not be aware of such issues. Some primary schools run anti-idling schemes around their schools, which could be encouraged or even made mandatory across the country.

### **Chapter 3: Protecting the environment**

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

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<sup>1</sup> <https://web.archive.org/web/20160104165807/http://www.who.int/mediacentre/factsheets/fs313/en/>

Considering the devastating impact that air pollution and poor air quality has on our environment and natural habitats, this Chapter is disappointingly lacking in detail or any actions on how to mitigate any impacts.

We comment on the actions to reduce ammonia emissions in the section on questions about Chapter 7.

CIWEM welcomes the commitment to monitor the impacts of air pollution and report annually so progress can be charted. However, more detail is needed on the format of this data, where it will be collected from, who will collect it and analyse it, and will there be any follow up or consequences of published data which shows breaches of limits. CIWEM suggests that the proposed new environmental watchdog should be given the remit to scrutinise the data and reports, assess progress, make recommendations and take enforcement action against breach of legislation as required.

In order for local authorities to be able to assess and enact the guidance explaining how cumulative impacts of nitrogen deposition on natural habitats should be mitigated and assessed through the planning system, they must be given the required resources to do this, which there is no commitment to do so in the Strategy.

## **Chapter 5: Action to reduce emissions from transport**

11. 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.

Transport is one of the biggest causes of air pollution and poor air quality, and the Committee on Climate Change's most recent Progress Report to Parliament said that it is the only sector where emissions of greenhouse gases are increasing<sup>2</sup>. Public awareness is already high regarding issues around transport and air pollution.

CIWEM welcomes the commitment to reduce emissions from shipping and aviation, as these are major contributors to air pollution.

The Strategy focuses on supporting 'lower emission road vehicles', for example electric vehicles, without acknowledgement that although they do not produce NOx emissions, they do emit Particulate Matter on a similar scale to conventional fuel vehicles, contribute to pollution through tyre wear-and-tear, and they are still a car which contributes to congestion. CIWEM believes that action must be taken not only on greening the fleet, but also on reducing the number of vehicles on the road, if air quality is to improve.

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<sup>2</sup> Committee on Climate Change. Reducing UK Emissions: 2018 Progress Report to Parliament. 2018.

Modal shift is clearly an important action for reducing emissions, and CIWEM welcomes the clear focus on encouraging more sustainable modes of transport such as cycling, walking and public transport. However, there is no commitment to new funds for walking and cycling, only a reannouncement of the £1.2 billion promised in the Cycling and Walking Investment Strategy in 2017. We need practical action and investment to make cycling safer and to encourage more people to choose walking.

There is no information on incentives or disincentives to encourage modal shift, such as monetary charges, Clean Air Zones and scrappage schemes. Research shows that charging Clean Air Zones are very effective at reducing emissions and improving air quality where they are introduced. CIWEM advocates for mandatory Clean Air Zones in our worst affect towns and cities, rather than the decision being forced on Local Authorities by making them voluntary, making sure to design them so they do not penalise those less well-off.

There is also no new investment strategy for public transport, which is vital in order to 'clean up' the fleet and reduce emissions, and also encourage people to take public transport instead of using their car.

## **Chapter 7: Action to reduce emissions from farming**

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

We welcome the Government's intention to "require and support farmers to make investments in the farm infrastructure and equipment that will reduce emissions" as a pragmatic approach enforcing regulations and encouraging uptake of best practices.

We also welcome the recently released code of good agricultural practice to reduce ammonia emissions. We would like to see adoption of the voluntary code widely encouraged alongside existing efforts by advisors to promote good practice in other areas. We would be interested to find out more about current thinking on whether the code could form part of a clean air standard within a wider gold standard for farmers, as mentioned in 7.3.2, which presumably relates to food labelling.

It is pleasing to see that the Catchment Sensitive Farming initiative will be expanded to cover air quality issues alongside water quality issues, having proved effective in that area. This makes good use of existing farmer-adviser relationships that can otherwise take some time to develop and so may yield improvements faster than a new independent initiative.

17. What are your preferences in relation to the 3 regulatory approaches outlined in the timeframe for their implementation: (1) introduction of nitrogen (or fertiliser) limits; (2) extension of permitting to large dairy farms; (3) rules on specific emissions-reducing practices? Please provide evidence in support of your views if possible.

Rule one of the Farming Rules for Water requires the application of organic manures and manufactured fertilisers to cultivated land to be planned in advance to meet soil and crop nutrient need and not to exceed those levels. We therefore think that the first regulatory proposal could be met through enforcement of the Farming Rules for Water. We do not think it would be reasonable to require farmers to use less manure and manufactured fertiliser than is needed by the soil and crops. Focus on spreading and incorporation methods instead would be more pragmatic.

We agree that large dairy farms should be brought within the environmental permitting regulations and subject to the adoption of Best Available Techniques which should result in air quality improvements. We note the recent introduction of a new Charges Scheme, moving the environmental permitting system to cost recovery pricing, and would highlight that the permits must be affordable, particularly given the economic uncertainty farmers are currently facing as a result of Brexit.

In line with our comments on the first proposal we support the introduction of the suggested rules on specific emissions-reducing practices through regulation. Given that ammonia targets are to be met by 2030 we question whether the timeframes for introducing incorporation and particularly for covering slurry stores and manure heaps could be brought forward allowing more time for air quality benefits to accrue. We understand that investment in low-emission spreading equipment requires greater investment, justifying a later implementation date.

In addition to the measures suggested we would welcome review of the historic exemption from Silage Slurry and Agricultural Fuel Oil (SSAFO) rules for installations constructed before September 1991, which we believe should be removed. We propose that all slurry stores should be required to meet the regulations. For many currently exempt stores this would require an increase in capacity. We recognise that farmers may be unable to fund improvements required to meet regulatory standards so suggest introducing time limited grant funding. Providing grant funding towards increasing store capacity, to a sustainable level for the land it supports, would help decrease the risk of non-compliance with relevant regulations, for example Nitrate Vulnerable Zone regulations and the Farming Rules for Water.

18. Should future anaerobic digestion (AD) supported by government schemes be required to use best practice low emissions spreading techniques through certification? If not, what other short-term strategies to reduce ammonia emissions from AD should be implemented? Please provide any evidence you have to support your suggestions.

It is important that digestate is spread using low emission techniques given that digestate can release more ammonia than the fertilisers it replaces. Introducing a requirement to use low emission spreading techniques would help minimise ammonia emissions associated with AD, as such we support this proposal.

However, where low emission spreading techniques require specialist machinery that is not currently widely used this will limit the number of farmers able to use the digestate and may impact on ease of disposal. Current availability of low emission

spreading equipment and funding for equipment purchase should therefore be considered in developing proposals further.

## **Chapter 9: Leadership at all levels (local to international)**

25. 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.

The European Union has played a fundamental role in holding the UK Government to account on air quality and pollution levels in recent decades, including the pending case before the Court of Justice of the European Union on the UK Government's failure to tackle illegally high levels of nitrogen dioxide. As we detailed in our response to Defra's Environmental Principles and Governance after EU Exit consultation, CIWEM believes that the new governance body must have at least the same powers as the institutions of the EU do currently, in order to hold the Government properly to account on its implementation of air quality legislation.

The new body should hold a range of effective enforcement powers in a system of escalation to use at its discretion, starting with informal discussions with relevant ministers, governmental departments and public authorities as appropriate, leading to advisory notices, binding notices, legal action and ultimately a fine.

In order to replicate the existing system, the new environmental body must have the power to levy fines at those who have been found in breach of environmental law. Economic sanctions are required to give the new body adequate authority and 'teeth'. Any funds collected should be ringfenced and used for environmental enhancement projects.

The Clean Air Strategy must be a genuinely fully integrated, cross-departmental Strategy for air quality improvement in order to be effective, as its impacts are felt across many sectors, such as health, transport, industry, the environment.

26. What are your views on the England-wide legislative package set out in section 9.2.2? please explain, with evidence where possible.

CIWEM is pleased that there is a commitment to bring forward new clean air legislation. However, we are concerned that there will not be a specific new Clean Air Act and instead it will be included in the new Environment Act. This vital piece of legislation may be lost in a wider and broader Environment Act which needs to include a range of other legislative measures.

We welcome a single coherent legislative framework for Local Authorities, as whilst solutions to air pollution problems will be specific to location, there is a need for a consistent approach across the country.

The Strategy relies heavily on local authorities to deliver actions, without explicit commitment that they will be provided with adequate resources to do so.

27. Are there gaps in the powers available to local government for tackling local air problems? If so, what are they?

Local Authorities should have a common framework and guidance for air quality improvement with the required amount of resources and funding in order to implement measures effectively.

## **Chapter 10: Progress against targets**

30. What do you think of the package of actions in the strategy as a whole?

CIWEM welcomes the government's commitment and focus on clean air, and the ambition to reduce air pollution. However, there is insufficient detail on a lot of the actions contained within the Clean Air Strategy to be able to evaluate whether they are likely to be successful.

Dramatic and ambitious action is vital in order to improve air quality and avoid thousands of premature deaths and illness each year.