Draft Air Quality Strategy

CIEH, ADPH, and ADEPT joint consultation response to DEFRA Draft Air Quality Strategy

21st April 2023

About the Chartered Institute of Environmental Health (CIEH)

CIEH is the professional voice for environmental health representing over 7,000 members working in the public, private and third sectors, in 52 countries around the world. It ensures the highest standards of professional competence in its members, in the belief that through environmental health action people's health can be improved.

Environmental health has an important and unique contribution to make to improving public health and reducing health inequalities. CIEH campaigns to ensure that government policy addresses the needs of communities and business in achieving and maintaining improvements to health and health protection.

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ADPH is the representative body for Directors of Public Health (DsPH), and is a collaborative organisation, working in partnership with others to strengthen the voice for public health, with a heritage which dates back over 160 years. ADPH works closely with a range of Government departments, including UKHSA and OHID as well as the four CMOs, NHS, devolved administrations, LAs and national organisations across all sectors to minimise the use of resources as well as maximise our voice.

ADPH aims to improve and protect the health of the population by:

- Representing the views of DsPH on public health policy.
- Advising on public health policy and legislation at a local, regional, national and international level.
- Providing a support network for DsPH to share ideas and good practice.
- Identifying and providing professional development opportunities for DsPH.
About the Association of Directors of Environment, Economy, Planning & Transport (ADEPT)

The Association of Directors of Environment, Economy, Planning & Transport (ADEPT) brings together directors from county, unitary, metropolitan and combined authorities, along with local enterprise partnerships, sub-national transport bodies and corporate partners drawn from key service sectors. ADEPT members look after your roads and transport, your environment, your local economy and wellbeing, alongside future plans for your area. ADEPT is a membership based, voluntary organisation with members across the country. Our primary role is to take the lead in transforming local authorities. We represent members’ interests by proactively engaging central government on emerging policy and issues, and promoting initiatives aimed at influencing government policy. We achieve this by developing best practices and by responding to government initiatives and consultations. Find out more about us.

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Key points:

• CIEH, ADPT and ADEPT are disappointed that we have such a short time to respond to such an important issue. Having this consultation released with many still on Easter break, many local authorities in pre-election period, and the Air Quality Strategy due for publication on 1st May, conveys the impression this consultation was merely a rubber-stamping exercise as opposed to genuine consultation that can influence the final strategy.

• Much of this consultation focuses on what local authorities must do to tackle air pollution. However, it is evident that without updated guidance, greater local government resourcing, updated legislation as well as central government action on significantly polluting industries such as agriculture, any actions taken by local authorities may be piecemeal and disjointed. While the focus on local authorities is welcome, success in reducing harmful emissions and meeting national targets also needs action by government, business, and individuals. It is unhelpful to single out councils for taking insufficient action. The draft Strategy fails to say what additional funding will be made available to councils.

• We agree with aligning local air quality monitoring within national boundaries as comprehensive, accessible air quality data within local government boundaries is important to facilitate an evidence-based approach to reducing air pollution.

• We agree that significant action should be taken to better regulate the most polluting domestic wood burners, particularly in urban areas. There are flaws within the existing regulatory framework which hamper effective local authority enforcement, such as Smoke Control Areas, which need updating from central government.

• We are of the view that the Environment Agency (EA) need to be mandated to ensure they permit all agricultural sites which meet the capacity aspect of the legislation e.g., pigs and poultry permits. Furthermore, enforcement action against agricultural sources of emissions falls outside the remit of local authorities and requires long overdue regulation from central government.

• Local authorities can help to reduce emissions from road transport by regulating vehicles – both private and commercial – and working directly with public transport authorities to ensure that they are operating low emissions public transport fleets. This requires further guidance, support, and funding from central government to guarantee budgets, encourage behaviour change, and to support enhanced monitoring. The new Local Transport Plan guidance will be a key framework to guide local planning and investment, it is important that Defra is engaged in it production to ensure that the Air Quality Strategy is adequately reflected there.

• We agree with the recommendations of the Chief Medical Officer, Professor Sir Chris Whitty, that the government should work with local authorities to set out a clear roadmap for improving indoor air pollution, while working to improve ventilation wherever possible, so that toxic air can be removed from the indoor environment.
Given the health impact of PM$_{2.5}$, it is important to promote the consideration of PM$_{2.5}$ in the planning system. Most importantly, public health should be placed at the centre of future national planning policy to improve population health and wellbeing, reduce the social cost of poor health, and deliver on the levelling up mission.

The draft Strategy states that there has been insufficient action by local authorities to reduce PM$_{2.5}$ and that if further action is still insufficient government will consult on introducing a new statutory duty on councils. If this happens then such consultation should be held at an appropriate time and over a long enough period to allow councils to consider the proposal properly and develop a detailed response. Any statutory duty on councils would need to be accompanied by corresponding powers to act against polluters and must be fully funded.
While we welcome the consultation, we are disappointed that we have only been given nine working days to respond to such an important issue. The consultation has a lot of focus on the role of local government, without any specific indication of funding, and little on the role of national government. It is not clear how the initiatives proposed in the strategy could be adequately funded and how this could make a real and significant difference to air quality, as has been seen in other countries.

We wish to stress that as the consultation timeline has been directed by legal duties to publish the Air Quality Strategy by 1st May, this leaves very little time for Defra to collect, review, and consider the depth and breadth of consultation responses that will be received. Therefore, this will also leave almost no time at all for Defra officials to make any necessary amendments to the Draft Air Quality Strategy leaving the impression that this consultation is little more than a rubber-stamping exercise rather than a true consultation.

Air pollution causes a considerable burden of death and disability and costs the UK economy £22.6 billion every year. In the UK, 40,000 deaths a year are attributed to exposure to outdoor air pollution through increased risk of diseases such as heart disease, stroke, respiratory diseases, and cancer. The World Health Organisation (WHO) has called air pollution (both indoor and outdoor): “the biggest environmental risk to health, carrying responsibility for about one in every nine deaths annually”. Furthermore, following the emphasis placed on air quality by the Chief Medical Officer in his 2022 Annual Report, it is therefore timely for the Government to review its National Air Quality Strategy.

With many sources of air pollution also emitters of carbon dioxide and other greenhouse gasses it is considered the clear link and benefit to the sustainability agenda could be identified as a leading contributor to a cleaner, greener, healthier future.

Local Authorities should be supported with resources, adequate staffing, and additional inspection capacity to enforce restrictions and reduce pollution. Large industries have made it expensive for local authorities to prosecute, and so the national Government plays an important role in supporting local authorities in enforcing regulations. Dedicated funding should be provided to local authorities to raise awareness and increase enforcement capacity. Enforceable restrictions should also be imposed within the existing regulatory framework. There are areas where local action may be considered inefficient, potentially creating a disjointed and incoherent picture for both business and the public to decipher. Where this is the case, it is suggested government takes a role to promote a consistent nationwide approach.

Government should use its other funding mechanisms to support its clean air ambitions. There should be more funding for local walking and cycling infrastructure. Major funding streams such as those for Levelling Up and Devolution should prioritise local efforts to reduce harmful emissions.

5. To what extent do you agree or disagree with our commitment to better align air quality reporting zones with local government boundaries?
   a. Strongly Agree
In any given local area, much of the air pollution will derive from local sources, in particular road transport, creating significant scope for local action. Aligning air quality reporting zones with local government boundaries would facilitate more effective data analysis, sharing and reporting in local areas.

Local authorities have a central role in achieving improvements in air quality. They have opportunities to improve air quality for the protection of public health and the environment through their decisions on local land use planning, environmental health, Smoke Control Areas (SCAs), roads, highways, environmental permitting and local air quality management. Their local knowledge and interaction with the communities that they serve mean that they know the issues on the ground in detail. They are best placed to work with partners to implement appropriate solutions for local transport, smoke control, planning and public health.

DsPH have a crucial role to play as leaders and influencers, shaping how local approaches can help clean up air in their area most effectively. Aligning air quality reporting zones with local government boundaries would facilitate coordinated action between key partners across local authority boundaries (including transport, planning, health, and education) to reduce the health impact, mortality and health inequalities associated with air pollution. The impact transboundary emissions have on the PM$_{2.5}$ environment has been considered when setting limit levels and compliance dates. However, it is important to understand what contribution local anthropogenic emissions make towards the measured concentrations compared to natural and transboundary sources and what proportion of these are within local authority power to mitigate.

Comprehensive, accessible air quality data within local government boundaries is important to facilitate an evidence-based approach to reducing air pollution. It would lead to an improved understanding of the trends and factors which influence air pollutants within local areas. It would also lead to a better assessment of the impact of public health interventions to tackle air pollution. This would add to the evidence base of high impact interventions which are likely to have the greatest co-benefits for both air quality and health. Actions to address the health impacts of air pollution can also play a critical role in supporting other local priorities, such as active travel, health inequalities and community engagement, sustainability and growth and regeneration.

6. **What more could local authorities do within the existing regulatory framework to reduce pollution from inappropriate domestic burning?**

Air pollution from domestic woodburning is a significant contributor of fine particulate matter. Levels have increased steadily over the last thirty years, and it is now the largest source of fine particulate matter (PM$_{2.5}$) in the UK. PM$_{2.5}$ is the most dangerous pollutant for human health and is linked to the causation and worsening of respiratory and cardiovascular diseases, as well as a likely link to cognitive decline and dementia risk.

We therefore agree with the inference that local authorities can and should do more to reduce pollution from domestic burning. For example, local authorities should be encouraged to follow the example of the Greater London Authority, which has effectively banned wood burners from being installed in new developments by introducing its Air Quality Positive London Plan Guidance. Local authorities could follow this example by updating their own planning guidance via their Local and
Neighbourhood plans. However, it is considered to be a much more efficient move to implement this at national planning policy level to create consistency and develop a level playing field for health across the country.

Whilst this would not address the current problems posed by woodburning in existing properties, it would ensure that future development was in keeping with the government’s long term and interim targets for the reduction of PM$_{2.5}$.

To take effective action on domestic burning, local authorities need sufficient resources available at the times when domestic burning occurs (usually evenings and weekends) and to have skilled and competent staff capable of assessing emissions from chimneys in such a manner that a civil penalty or statutory nuisance action is proportionate and further legal action is successful.

Given that the consultation document specifically makes note to PM$_{2.5}$ being a transboundary pollutant and knowing that there is a significant amount of regional PM$_{2.5}$ contribution to each locality PM$_{2.5}$ loading (see page 49 of CMO’s Annual Report 2022), we are of the view that placing the burden on local authorities is inappropriate. A national stance is required to ensure that a piecemeal approach is avoided where authorities in need of improvements downwind from areas which don’t take swift action are left with the health challenge blown onto them from the wider area.

Furthermore, we note that statutory nuisance is referred to within the consultation to enforce against nuisance domestic burning including from internal appliances. However, we suggest that the UK Government provide clarity to understand what exactly this means.

We also note that the draft Air Quality Strategy states that the UK Government are “not considering a ban on domestic burning in England”. We suggest that it is essential to introduce a caveat by including the wording “at this time”. It is essential that government keep all options on the table in future given the rise in emissions from this source over recent years.

However, we wish to note that given that Defra has indicated that a decrease of 1 ug/m$^3$ could lead to a 0.8% increase in GDP there should be room to drive more significant national action on domestic burning and at the same time help with climate change.

We also feel that more restrictions should also be imposed within the existing regulatory framework to outlaw more polluting wood burners in urban areas. Furthermore, should the UK Government not be considering a blanket ban on domestic wood burners in urban areas, at the very least tougher emission standards and policies should be introduced to incentivise a shift towards newer appliances. Although the mandatory certification scheme (ready to burn) helps to indicate that wood being sold is deemed ‘dry’, more should be done to encourage the use of more modern burning stoves and less polluting wood.

Under existing legislation, local authorities can prosecute households emitting smoke from wood or coal in areas designated as a SCA. However, securing successful prosecutions is quite difficult for a variety of reasons (cost of litigation, securing warrants, crossing criminal threshold etc.), which meant that the number of successful prosecutions is low. Therefore, we welcome the introduction
of civil penalties via the Environment Act 2021 which allows local authorities to impose on the spot fixed penalty notices for those engaging in inappropriate domestic burning.

Not only is it important to issue civil penalties, but it is also important to publicise such action as a means of altering public behaviour. Experiences of local authorities issuing civil penalties for other offences, such as littering, indicates that publicity following enforcement action can be effective in reducing offending practices.

However, for enforcement of SCAs to be effective, the UK Government needs to produce better quality guidance for enforcement officers in respect to what constitutes a substantial amount of smoke. Furthermore, with respect to SCAs, the maps for many SCAs have been lost and local authorities have been advised that with the original plans legal action cannot be taken. This puts local authorities in the situation whereby they must undertake costly and resource-intensive undertaking of re-designating and re-consulting in order to secure the original mapping and secure a prosecution. If local authorities are to be expected to rely on SCAs as an effective means of tackling air pollution, then the SCA legislation urgently needs amending.

Given how we know that polluting activities do not solely impact the area in which the activity takes place, but that pollutants can travel for quite some distance, it is remiss to ignore the role inappropriate domestic burning plays in the wider air quality discussion. However, some rural local authorities have suggested that as they operate within areas that are not subject to either SCAs or Air Quality Management Areas (AQMAs), they often lack any form of statutory footing by which to tackle polluting activities in their areas. By redesignating all areas of England as an SCA, rural local authorities would then have the recourse to tackle those engaging in inappropriate domestic burning activities. See question 13 for more information.

Finally, the Government should also provide initiatives to cut heat demand through insulation. There is strong evidence of poor insulation in many rented properties. The energy crisis in 2022/2023 and the resulted fuel poverty also led to an increase in demand for cheap but polluting firewood and wood-burning stoves. Continued funding and commitment from the Government is key to addressing fuel poverty and achieving improved energy efficiency and ventilation in all properties across the UK to prevent pollutants concentrating indoors and air quality worsening. However, the current funding of £3.4 billion falls short of the £104 billion required for this mass retrofit.

If those in most financial need had appropriate insulated homes the need to reduce cost and seek to burn would be reduced. Government should consider a grant scheme to promote moving the most vulnerable away from solid fuel burning through insulation and fitting of heating systems appropriate to the property including appropriate ventilation means. This would enable a move away from polluting heat sources and combat the mould and damp growth often associated with lower cost housing.

7. **How do you feel local authorities can most effectively reduce pollution from industrial sources they are responsible for?**
With respect to industry, local authorities promote cleaner air by ensuring environmental permits are adhered to. It is essential that local authorities are resourced to undertake this work properly. One way in which this could be done is through an increase of annual permit fees would be welcomed to ensure staff can be dedicated to the task.

This would ensure that local authorities have suitably resourced departments equipped to assess and enforce regulations, as well as ensuring that permitting is prioritised within environmental protection teams. Environmental permitting is a technically detailed and complex field of work which requires the need for a dedicated officer, skilled in the field of environmental permitting, to be responsible for carrying out inspections and taking enforcement action.

We are of the view that the Environment Agency (EA) need to be mandated to ensure they permit all agricultural sites which meet the capacity aspect of the legislation e.g., pigs and poultry permits. It is known that this is not currently the case from past member involvement and queries. The current stance has been if an installation is not stocking above threshold levels it does not need a permit. This is not acceptable given the clear legislative position that it is a capacity aspect that is important. As it currently stands, the agricultural industry is not being regulated in many circumstances meaning no matter the Best Available Techniques standard, these may not be implemented and enforced.

BAT requires updating with a sliding scale to promote future betterments as expected mitigation and methods come online. This applies across the whole permitting regime. An example of a deficiency is intensive agricultural installations which require environmental permits, regulated by the EA. Agricultural installations, such as poultry units, extract air which is then emitted to the environment adding significant sources of ammonia. As ammonia is a precursor of PM$_{2.5}$ this creates part of the regional as well as local PM$_{2.5}$ contribution. This emission source moves into urban areas where PM$_{2.5}$ concentrations may be highest. In order to remove this key pollutant, it is recommended that any extract air from intensive agricultural activity is scrubbed, removing typically over 90% of ammonia emissions. This requires BAT to be updated to include this element and/or clear planning guidance that stipulates that this is a mandatory element across the board which would include smaller installations. This standard would need to come into force for all new sites and consider how it is retrofitted into existing sites. We suggest that this could be done over a phased timescale and in any case, should be stated as a requirement should an existing site wish to expand. Note: this paragraph should also be read in respect of question 9 of the consultation response.

Local authorities are excellent at enforcing against permits but can only ask for what is specified in what are now outdated guidance and requirements. We suggest that the UK Government take action in providing clear and updated guidance and requirements for environmental permitting.

Finally, EA regulated waste sites are a significant source of particulate emissions. Local authorities are precluded from taking action against EA regulated waste sites except with the express consent of the Secretary of State. Waste sites should be specifically mentioned in this section and an expectation placed on the EA for robust regulation. Should the EA fail in their duty to enforce against such waste sites, enforcement powers, and funding for such, should be handed over to the relevant local authority with associated funding provision.
8. **How do you feel local authorities can most effectively reduce pollution from transport and non-road mobile machinery (NRMM)?**

To be effective in reducing pollution from transport, local authorities require:

- Clear and co-ordinated guidance from Central Government across all the relevant functions (including spatial planning, transport and air quality). This is especially relevant for two-tier authorities where the responsibilities are split.
- Funding regimes that provide a level of certainty of future budgets so that authorities can develop long-term programmes that will provide more cost-effective measures that the current stop-start bidding processes.
- Financial incentives in the next round of Local Transport Plans for Local Transport Authorities to plan measures that will reduce transport pollution.
- Better funding regimes to enable local authorities to comprehensively monitor the impact of transport schemes on air pollution.
- Increased and consistent funding streams to allow local authorities to deliver behaviour change schemes that will enable the maximum use of existing (and new-build) active travel and passenger transport infrastructure.
- The forthcoming Great British Railways to work with local authorities to maximise the use of railways as an alternative to the car.

There seems to be a key omission in the strategy in that there is no mention of the Local Electric Vehicle Infrastructure funding (and On-Street Residential Charging funding) streams to accelerate local authority roll out of EV charging infrastructure which should help reduce tailpipe emissions.

Local authorities can help to reduce emissions from road transport by regulating vehicles – both private and commercial – and working directly with public transport authorities to ensure that they are operating low emissions public transport fleets.

**Vehicle regulation**

Charging zones, whereby vehicles are charged for entering a certain location, are one of the few tried and tested methods for reducing air pollution from road transport vehicles. They have had a measurable impact everywhere that they’ve been introduced, whether that’s the Congestion Charge and Ultra Low Emission Zone (ULEZ) in London or Clean Air Zones in cities like Portsmouth, Birmingham, and Bath.

The charging zones that have had the most impact operate 24/7 and charge all vehicles, including private vehicles. For example, London’s ULEZ has meant that NO\textsubscript{2} emissions are 46% lower than they would have been had it not been implemented in 2019. Birmingham’s Clean Air Zone reduced NO\textsubscript{2} levels by 13% in the first six months alone.

At a national level, guidance on CAZ classifications need to be updated to promote the need to reduce car usage. at a national level to create buy in. Doing so would create ‘buy in’ at a local level. Furthermore, there is also a need for more ambitious NO\textsubscript{2} targets to promote the need for
continuing to introduce CAZs and these types of interventions in all AQMAs with central funding provided to support as was the case with those that were mandated to create Local NO\textsuperscript{2} Plans.

However, for Clean Air Zones to be the most effective, local authorities should ensure that they discourage use of all vehicles, no matter their emissions standards. It is only by reducing the total number of cars on the road, including electric vehicles, that we will reduce all types of pollution, including PM\textsubscript{2.5} which from road transport is produced predominantly by vehicle braking and tyres.

Local authorities must provide appropriate support for people and businesses to upgrade their vehicles when implementing a Clean Air Zone, or other charging zones. This will help all people to change to less polluting modes of transport, such as electric buses, e-bikes or cargo bikes, no matter their income level. This support could take the form of a scrappage scheme or mobility credits – whereby a vehicle is swapped for credits to use on public transport. Mobility credits have multifaceted benefits in that they promote the need to have fewer cars on the road, support congestion challenges faced by most major urban centres, as well as promoting better public health while supporting our carbon and net zero objectives.

Furthermore, local authorities can work with transport partners to:

- reduce congestion and providing credible alternatives to the private vehicle, such as reliable and effective public transport.
- reduce antisocial behaviour on the transport network, to encourage better patronage.
- implement effective intelligent sequencing of traffic lights by using Air Quality sensors at junctions to determine traffic flow and elevated pollution levels.
- encourage large companies to subsidise public transport for their staff’s commute.

**Upgrading the fleet**

Local government should work with local transport authorities to ensure all public transport is upgraded as quickly as possible to reduce the amount of pollution stemming from the bus fleet. Government should mandate each local authority deliver an ambitious net zero transport plan before the end of 2025. However, it should be noted that Local Authorities in more cases than not do not hold much sway on this front. It is therefore suggested that a national standard for buses be introduced with funding to promote retrofitting for all bus operators. This retrofit scheme could be led, but not funded, by local authorities.

NRMM requires a national set of rules to remove the burden of looking to enforce local rules and planning conditions. This would be more efficient than local authorities setting conditions through the planning regime, as it sets a level playing field across the country providing consistency for the trade and promotes fleet renewal over time faster than would otherwise be expected to occur.

We welcome the continuous investment from the Government on active and sustainable travel, including the local Capacity fund to better enable LAs to deliver active travel schemes. 81.2% of Director of Public Health prioritise active travel in terms of transport policy and investment decisions. Improvements to air quality can be achieved through making walking, cycling and use of public transport accessible so that it becomes the preferred form of mobility.
The Government should provide consistent and positive messaging about the benefits and need for using public transport as well as active and sustainable travel. More investment should be allocated to support walking, cycling and use of public transport (for example through wider pavements, cycling infrastructure, planting trees, and street furniture between footpaths and roads). Public transport should also be made more affordable and accessible. Road systems which encourage continual traffic flow rather than stopping and starting can help to mitigate the impact of diesel and heavy goods vehicles. The adoption of 20mph speed limits and phased traffic lighting, where appropriate, also have positive effects such as reducing air pollution, noise pollution and road traffic injuries. This makes it safer for children to engage in more physical activity outside while supporting greater community cohesion and the viability of local businesses. Furthermore, local initiatives can encourage a shift away from car use through road layout changes, parking restrictions and public realm improvements.

Finally, it must be noted that any and all action that local government can take must also be read in the context that there is more that central government could and should be doing to support these efforts. For example, idling legislation should be updated to increase the fine and streamline the process of obtaining vehicle ownership details for which to serve notices upon. Planning conditions for major development sites, particularly in city centres, should discourage the provision of staff parking and incentivise public transport use through Travel Plans. See our answer to question 13 for more information.

9. How do you feel local authorities can most effectively reduce pollution from agriculture?

In short, we contend that it is not the role of local authorities to fill the gaps left by the absence of top-down industry-wide regulation from central government. We strongly suggest central government introduces measures that reduce pollution from agriculture in top-down manner.

We have made several representations as to the role agricultural sector has to play with respect to emissions of nitrous oxides and ammonia and the impact this has on local air pollution.

Furthermore, the £33.9 million in grant funding for the agricultural sector to voluntarily self-regulate emissions arising from their polluting activities is almost three times the amount of funding of £11.6 million that was made available to local authorities in the Air Quality Scheme. We suggest that the UK Government must do more to fund more work of AQMAs and areas exceeding 10ug/m^3 PM_{2.5} in year and in future years.

We are delighted see the proposal to consult on bringing dairy and intensive beef farms within scope of environmental permitting as well as a proposed consultation on new restrictions for lower emission techniques for slurry and digestate spreading and storage. However, it is long since time the UK Government took firmer action on the agricultural sector and introduced regulatory measures in line with steps taken to reduce emissions from other polluting industries. See question 13 for more information.

10. How do you feel local authorities can most effectively improve indoor air quality?
Adults spend more than 80% of a typical adult day indoors. Despite this, we have much less knowledge about the sources and people’s exposure to indoor air pollution.

We agree with the recommendations of the Chief Medical Officer, Professor Sir Chris Whitty, that the government should work with local authorities to set out a clear roadmap for improving indoor air pollution, while working to improve ventilation wherever possible, so that toxic air can be removed from the indoor environment. We also promote the consideration of investigating public space limit levels for set pollutants in consultation with relevant partners.

Local authorities can also work in more joined-up ways, linking planning, environmental protection, and housing teams together to ensure that planning developments factor in considerations that promotes good indoor air quality. For example, housing officers can take enforcement action against private landlords who do not provide effective ventilation. Ventilation in all settings should follow appropriate standards, therefore ensuring professionals are more familiar with the best practice on indoor air quality including ventilation is a step in the right direction. It is vital to ensure housing has adequate ventilation and better insulation to prevent pollutants concentrating indoors and air quality worsening. Local authorities can provide education and public awareness campaigns for occupiers on the causes of condensation and the actions they can take to mitigate its effects. From a planning perspective, requiring extractive ventilation in bathrooms and kitchens to help remove both moisture and emissions would have a positive effect on indoor air quality. Finally, local authorities can also embark on education programmes for builders who retrofit bathrooms/kitchens to recommend they install extractive ventilation where possible.

Smoking tobacco products is also a significant driver of health inequalities, with half of the difference in life expectancy between the least deprived and the most deprived areas being caused by smoking. The Government should ensure all social housing in communal buildings is smoke-free, making stop-smoking a norm and protecting non-smoker populations from the harms of second-hand smoke. The results from our 2019 Policy survey among DsPH showed that 88% of respondents thought the ban on smoking should be extended to include the immediate vicinity of schools and colleges. 80% thought the ban should cover parks and playgrounds, and 88% thought the ban should include sports and leisure facilities. A consensus has been developing amongst DsPH that nicotine vaporisers can be used in some settings to enable them to become smoke-free. Smoke free places are not the responsibility of Enforcement Officers alone. Housing, fire, social services and the NHS must all play a part in protecting our communities from second-hand smoke.

In addition to smoking, ventilation, mould and damp, domestic burning and outdoor air quality also affect indoor air quality. Measures should be taken to restrict the use of polluting wood and promote sustainable transportation. Please refer to question six and eight for more detailed explanation.

There also needs to be close alignment and understanding of the potential co-benefits and pit falls of carbon reduction measures. For example, we need to ensure we protect ourselves from any unintended consequences in our Net Zero ambitions to ensure that we are not blind to any aspects such as hydrogen burning in domestic boilers creating NO\textsuperscript{2}.

We welcome the Government’s commitment to develop a new guidance on mould and damp for the housing sector. There are striking health inequalities associated with air pollution, as people
with low incomes are more likely to have existing medical conditions, live in areas with poorer outdoor and indoor environments (for example, near to industry or busy roads), and have worse access to good quality housing and green spaces.

However, despite the action local authorities can take, there is more central government can do to support better indoor air quality. The Air Quality Strategy should take into consideration the impact of health inequalities in its proposals. The Government should also support households to improve insulation to prevent mould from forming in the first place.

11. **How do you feel local authorities can most effectively communicate air quality information?**

Engaging the public is important if we are to achieve the national air quality targets as outlined in the air quality strategy, as it allows businesses, industries, and the public to understand how their choices can impact on others and the wider environment. Currently, communication of air quality information is often not prioritised, and air quality information is often only available via webpages and social media. Most people are not aware of this information and as a result it has not been able to reach a wide audience. We welcome the provision and distribution of information on air quality through social media and we agree that more work is required to communicate this information to the public, particularly more vulnerable groups. This can be done through social media marketing campaigns, the use of social influencers, seasonal targeted campaigns, and broader campaigns designed to reach a wider audience.

However, whilst it is important for local authorities to share air quality information with their communities, it is also vital that this is backed up with strong and consistent national messaging relaying the detrimental impact of air pollution. Such national guidance could then be tweaked for local contexts, ensuring there is a blend of a consistent national message, tailored for local audiences. Local authorities should be supported in ongoing information provision around air quality monitoring and issues to allow the public to be suitably informed.

Given the disproportional impact on vulnerable individuals including those with an existing health condition and the fact that exposure to air pollution creates disease that would not otherwise have occurred it is suggested that the medical and health professions are key trusted messengers in delivering messages to these groups. Trials have been carried out with GPs in London preceding a national pilot to create air quality champions in the GP community. More work is required on this theme and more research should be done to determine what innovative approaches would be effective in engaging groups most susceptible to poor air quality. The most vulnerable members of society and health care professionals should know where to obtain information on local air quality. They should be regularly notified, particularly when incidents or occasions of poor air quality take place.

More work could be carried out with schools so that people are aware of the sources of poor air quality. Work could also be carried out with local businesses around travel planning for delivery and commuting time to avoid high concentration of air pollutants during rush hours helping to reduce peak pollution concentrations and reduce personal exposure to those travelling. Reducing pollution sources and reducing personal exposure are considered to be linked but separate areas on which information provision is required.
It is suggested the Air Quality Information Systems review takes all information provided on this question into consideration when creating recommendations on how to proceed.

12. Do you feel that there are additional powers relating to air quality which should be available to local authorities?

1. Yes

Wood burning
We support the work of HAC partner Asthma + Lung UK, which recommends giving local authorities the power and legal duty to implement smoke free zones in all places where PM\textsubscript{2.5} is above the World Health Organization Air Quality Guidelines. These would replace the ineffective and defunct smoke control areas as a flexible and adaptable measure to cover specific neighbourhoods defined by concentration peaks in PM\textsubscript{2.5} and population vulnerability. For example, areas around schools and hospitals should be automatically designated, as we know that they are places with high numbers of people vulnerable to the health impacts of air pollution.

In all other instances, the local authority should have discretion for implementing smoke free zones, as they have the best understanding of what is happening in their area although a consistent national emphasis as previously mentioned in the response is considered suitable for consideration. All smoke free zones should be delivered in collaboration with DEFRA, alongside a significant increase in resources to ensure proper consultation with residents and the correct enforcement of the zones, particularly in the most densely populated areas.

Modal shift
Lord Berkeley, Lord Young of Cookham, Lord Hunt of Kings Heath and Baroness Randerson have tabled an amendment to the Levelling Up and Regeneration Bill which recognises the importance of protecting and enhancing cycling and walking routes through development. We support this amendment, which would give local authorities greater powers to encourage modal shift away from cars and towards active travel, a key component of improving air quality.

The amendment is as follows:

“After Clause 93, insert the following new Clause— “Cycling, walking and rights of way plans: incorporation in development plans.”

(1) A local planning authority must ensure that the development plan incorporates, so far as relevant to the use or development of land in the local planning authority’s area, the policies and proposals set out in—
(a) any local cycling and walking infrastructure plan or plans prepared by a local transport authority;
(b) any rights of way improvement plan.

(2) In dealing with an application for planning permission or permission in principle the local planning authority shall also have regard to any policies or proposals contained within a local cycling and walking infrastructure plan or plans and any rights of way improvement plan which have not been included as part of the development plan, so far as is material to the application.
(3) In this section—
(a) “local planning authority” has the same meaning as in section 15LF of PCPA 2004;
(b) “local transport authority” has the same meaning as in section 108 of the Transport Act 2000;
(c) a “rights of way improvement plan” is a plan published by a local highway authority under section 60 of the Countryside and Rights of Way Act 2000.”

Member's explanatory statement: This new Clause would require development plans to incorporate policies and proposals for cycling and walking infrastructure plans and rights of way improvement plans. Local planning authorities would be required to have regard to any such policies and proposals where they have not been incorporated in a development plan.”

Finally, we feel that the UK Government could consider adopting the Polluter Pays Principle and fund local authority interventions with fees and charges from the industry. This should ensure all costs incurred by the local authority are paid by the polluter, including enforcement costs.

13. What further support could government provide to help with actions taken locally to tackle air quality?

- Increased guidance
- Face to face teach-ins on topics
- Virtual teach-ins on topics
- Enforcement pro-formas or templates
- Sharing space or website for best practice examples of local working
- Knowledge hub including assets for local authorities
- Other (please specify)

We are in support of all of the above measures, and feel that they would be useful, to varying degrees.

However, unless the Government can provide strong central messaging and enforceable regulations (not just guidance), with funded capacity for enforcement, these measures will have limited effectiveness.

Additional funding is also required for enforcement and education. The Government should provide more resources to place/environmental teams in LAs. More funding could also be allocated via an Air Quality Grant.

More public health funding is also needed to reduce harm and mortality caused by air pollution. In England, local authorities' public health funding has suffered a 26% cut (in real terms on a per person basis) since 2015/16. It is estimated that £0.9 billion will be needed annually to restore funding to 2015/16 levels. Although DsPH, Environmental Health and Protection Services have been acting to manage these cuts they have reached the limit of available efficiencies. In the UK, 40,000 deaths a year are attributed to exposure to outdoor air pollution through increased risk of diseases such as heart disease, stroke, respiratory diseases, and cancer. Public health needs to be funded sustainably and adequately in line with local population health need.
The monitoring capabilities available to local authorities are currently inadequate to provide the full picture of local air quality that councils need to act.

We note that the government is aiming to deliver up to 100 new PM$_{2.5}$ monitoring stations over the next three years and by 2028 at the latest. However, DEFRA has stated that this is the minimum number required based on the department’s sampling. These minimum standards are unlikely to be enough to truly understand levels of pollution in the most populated agglomerations. For example, under this analysis, the legal minimum requirement for PM$_{2.5}$ monitors across London would be just 15 monitors to measure compliance with the Annual Mean Concentration Target for PM$_{2.5}$ and, of this 15, 10 would be background monitors to measure compliance with the Population Exposure Reduction Target.

For local authorities to have the information they need to analyse PM$_{2.5}$ levels, identify hotspots and implement targeted interventions, a more ambitious expansion of the monitoring network is required. The government should aim to have at least 100 monitors in each local authority area before 2027. These need to be both diffusion tubes and advanced monitors capable of giving a mixture of average levels of PM$_{2.5}$ as well as live readings to help highlight hotspots and peak hours. All the data from this monitoring network should be open-access for everyone to view when needed.

The Breathe London network was able to install, maintain and insure air quality sensors at 139 sites between December 2020 and September 2021. This network also has a simple online tool for accessing the data. There is no reason why every local authority could not have the same sort of network by 2027 if supported by appropriate funding from central government.

Finally, there is no explicit duty placed on the government by The Environmental Targets (Fine Particulate Matter) (England) Regulations 2022 to review and revise the monitoring network to ensure it is kept up to date with the latest technological and scientific standards and that the placement and numbers of stations remains appropriate. This represents a loosening of regulations compared to the regime under the Air Quality Standards Regulations 2010, which requires a review of the network every five years. We believe the government should revisit this.

14. To what extent do you agree or disagree that a new approach needs to be employed to promote consideration of the PM$_{2.5}$ targets in the planning system?

1. Strongly Agree

There is no safe level of fine particulate matter to breath. Furthermore, the targets set by government lack ambition. They lag significantly behind the World Health Organization’s latest guidelines (5 µg/m$^3$) and will mean that we will reach their 2005 guidelines (10 µg/m$^3$) 35 years after they were set. It is therefore fundamental that the planning system is reformed to at least align with the government’s long-term targets for PM$_{2.5}$, as well as its interim target to reduce population exposure by 22% by the end of January 2028.

However, given the significant body of evidence that suggests that 10 µg/m$^3$ could be achieved in 99% of the country 10 years earlier, by 2030, there is clearly the opportunity for local authorities to
support a greater level of ambition currently set by the government, depending on local circumstances. Again, the GLA’s “Air Quality Positive approach” should be adopted by local authorities nationwide to ensure all development maximises benefits to air quality or potentially a more efficient route would be to include this in national planning policy or similar.

It is crucial to develop a new approach to promote consideration of the PM$_{2.5}$ targets in the planning system to reduce the health impact of air pollution.

PM$_{2.5}$ has the strongest epidemiological link to health outcomes and is used for the Public Health Outcomes Framework indicator 3.01. At this size the particles can be inhaled deep into the lungs. The very smallest particles, ultrafine PM$_{0.1}$, (the smallest fraction of PM$_{2.5}$) are nano-particles smaller than 0.1 microns and are thought, once inhaled, to be able to pass directly into the bloodstream.

Planning policies have a huge impact on the emission and concentration of PM$_{2.5}$. Much of the PM in urban environments, particularly those close to roads, can come from traffic sources and comprises soot, part burnt diesel and petrol compounds that form benzene-based carcinogens, heavy metals, silica, bitumen, rubber, and organic and other waste matter from road surfaces. PM$_{2.5}$ can also be composed of particles from combustion products, products from abrasion of engine components, brakes, and tyres on road surfaces, generated during construction and agricultural processes, as well as components generated by chemical reactions in the air. These are all factors that could be affected by planning. A new approach should therefore be developed to promote consideration of the PM$_{2.5}$ targets in the planning system to reduce the health impact of air pollution.

Health is an important asset for economic productivity. Given the health impact of PM$_{2.5}$, it is important to promote the consideration of PM$_{2.5}$ in the planning system. Most importantly, public health should be placed at the centre of future national planning policy to improve population health and wellbeing, reduce the social cost of poor health, and deliver on the levelling up mission.

15. What do you think are the merits or drawbacks of a design-stage emission prevention approach as set out in this chapter?

Influencing the design of a scheme at an early stage can ensure that considerations of the environmental and health impacts of emissions are placed at the heart of planning policies. It could also enable the involvement of Planning Directorate/ OHID at an early stage. Nonetheless, further measures should be taken to ensure that final planning decisions can minimise the amount of pollution and its associated health impact. For example, there should be mechanisms to ensure that measures to curb air pollution proposed at the initial stage of a project are followed through at the end. There should also be consequences for not implementing the proposed measures, for example fiscal penalties.

CIEH will be producing a member-led response to the current open consultation on the Environmental Outcomes Reports: a new approach to environmental assessment on this issue.

16. Are there any additional assessment approaches or points we should consider when developing proposals to integrate the PM$_{2.5}$ targets in the planning system?
Yes.

Lord Crisp has tabled a series of amendments to the Levelling-up and Regeneration Bill (LURB) that introduce the concept of ‘healthy homes’. We support these amendments to ensure that the planning system is updated to deliver improved health outcomes, including tackling indoor and outdoor air pollution. In particular, we agree with the following clause:

“All new homes should not contribute to unsafe or illegal levels of indoor or ambient air pollution and must be built to minimise, and where possible eliminate, the harmful impacts of air pollution on human health and the environment”.

This could be made more specific to ensure that new development does not endanger local progress towards the government’s PM$_{2.5}$ targets and beyond.

The Government should adopt a Health in All Policies approach and consider the impact of planning decisions on public health and health inequalities. The use of a health impact assessment should be encouraged in the planning system to ensure that considerations of health, wellbeing and disparities can inform planning decisions.

While many of the complexities to local plan preparation are not within the scope of public health, they nevertheless frame public health involvement in the plan-making process. It is therefore crucial to ensure that the planning system enables public health professionals to have a say in the planning process, so that local public health and other health strategies can influence the planning processes and address identified health and wellbeing needs and priorities.

Finally, we feel that exposure assessments should be considered when a development meets certain criteria.