



Cleaning up London's air

LEDNet/ADPH London Joint position statement

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Executive Summary

Air pollution in London is a major public health issue. Each year, thousands of **premature deaths are in part attributable to poor air quality**, which **widens inequalities** by reducing the length and quality of life in most vulnerable residents, including children, and **costs the NHS up to £3.7 billion each year**. In light of the COVID-19 pandemic, the national lockdown for the first wave from March 2020 to June 2020 led to a behavioural change of Londoners that contributed to the temporary improvement in air quality, with a reduction in personal vehicle usage, road traffic, and an increase in active travel whilst socially distancing. The pandemic has also highlighted the stark health inequalities of the city, with researchers assessing the potential risk of COVID-19 deaths and air pollution.

During and beyond the pandemic, we must look at sustaining behaviours that contributed to the positive changes to air quality where possible and address the health inequalities that have been observed. **The London Environment Directors' Network (LEDNet) and the Association of Directors of Public Health London (ADPH London)** have revised this joint position statement on air quality and health to set out how we believe we should be responding to this challenge, based on our expertise and the available evidence.

Our recommendations are:

1. To advocate for at least [2.5% of UK annual GDP](#) to be spent on tackling air quality and climate change in the UK.
2. **Capitalise on behavioural changes on active travel during COVID-19 pandemic**, protect Londoners, particularly children and young people from exposure to poor air quality, and **promote further inclusive active travel**.
3. Support a **shared narrative and campaign** on air quality and public health impacts across London that will change the public's perception around their own contribution to cleaning our air.
4. **Restrict driving fuelled by petrol or diesel and support cleaner alternatives** by supporting schemes such as the [Ultra Low Emission Zone \(ULEZ\)](#), and scrappage schemes and local schemes such as restricted and emissions-based parking, low emissions zones, school streets and Low emission neighbourhoods as well as building better walking and cycling infrastructure.
5. **Support retrofitting schemes** of London's residential properties to reduce fuel poverty, address health issues caused by inefficient housing and green the economic recovery from the COVID-19 pandemic.
6. Use **public sector procurement and social value action** to reduce our own contribution to air pollution, in particular by moving faster towards ultra-low and zero emissions vehicle fleets.
7. **Speak with one voice** as boroughs to secure the resources and powers needed to reduce air pollution and protect the health of our residents.

Our audience for this joint position statement includes local, regional, and national policymakers, environmental lobbyists, public health practitioners, environmental health practitioners, London health and care partners.

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1. Background

Air pollution in London is a major public health issue. Research published in 2019 by Friends of the Earth shows that almost 500 parts of London exceeded the legal limits for NO₂; in 2016, Putney High Street broke the hourly limit more than 1,200 times (Harvey and McIntyre, 2019). Whilst there have been improvements reported of NO₂



levels from 2016 to 2020 reported in the [Mayor of London's London Environment Strategy: Air Quality Impact Evaluation](#), parts of London still exceed the legal limits for NO₂, and most of the city still exceeds the World Health Organization (WHO) guideline limit for fine particulate matter PM_{2.5} and PM₁₀ (Centre for London, 2018). In July 2020, a YouGov poll showed that 45% of respondents from London believe air pollution to be a 'fairly big problem', and 28% a 'very big problem'¹. Additionally, London Council's 2020 Air Quality Public Polling showed that 78% of Londoners think that tackling air pollution should be a priority².

Each year, thousands of **premature deaths** are in part attributable to poor air quality through increased risk of disease such as heart disease, stroke, respiratory disease and cancer (Walton et al., 2015). This widens inequalities by reducing the length and quality of life for our most vulnerable residents, including children, and costs the NHS up to £3.7 billion each year (Walton et al., 2015). We also know that air pollution **affects cognitive ability**; research published in the last year has further highlighted links between air pollution and dementia (PHE, 2018).

There are **health inequalities** associated with environmental pollution, especially around air pollution. Research carried out by Imperial College London showed that there were higher concentrations of particulate matter and nitrogen dioxide in the most deprived 20% of neighbourhoods in England (Fecht et al., 2014). Air pollution also has an impact on children living in deprived areas.

Public perception is changing: 83% of London residents now think that tackling air pollution should be a priority (London Councils, 2019). Clean air is a joint responsibility of government, the private sector and individuals, and we must take a partnership approach to identifying priorities and funding action to deliver on them. Within London local government, political leaders are making air quality a unifying priority. In 2019, 26 boroughs and the Mayor of London passed climate emergency declarations.

The Transport and Environment Committee (TEC) and London Environment Directors' Network (LEDNet) issued a joint statement in December 2019, identifying the need to act rapidly and collectively on climate change, particularly on the priorities around halving petrol and diesel road journeys, reducing consumption emissions and building a green economy (Community Energy London, 2019). Equally, the Mayor of London has made cleaning up London's air a key priority for his administration, and improving air quality is one of the areas of focus for pan-London collaboration in health and care as part of the London Vision to make London the healthiest city in the world (NHS England, 2019).

¹ <https://yougov.co.uk/topics/science/trackers/how-much-of-a-problem-brits-believe-air-pollution-to-be?crossBreak=london>

² <https://www.londoncouncils.gov.uk/our-key-themes/environment/air-quality-london/air-quality-public-polling>

Causes of air pollution

Road transport is currently the most significant source of emissions in London, and a key priority for the city. The evidence shows that restricting emission of pollutants at source is the most effective means of improving air quality. We therefore support policies and programmes that can do this; where we can **encourage residents to embrace active travel by walking, cycling and using public transport** instead of driving this will also bring the added benefit of increased physical activity to their overall health and wellbeing. Public transport will of course remain a key means of getting around, which is why subsidies and investment in public transport are also an effective means of tackling air pollution.

There are also considerable static sources of air pollution in London, mainly arising from gas boilers, machinery and construction, and industry. Other sources, including woodburning stoves, accidental fires and burning of waste, along with natural sources, are also contributors. We need **new powers at the national and local level accompanied by adequate resources** to effectively address these sources.

London's homes account for around 36% of all emissions in the capital and with more than 80% of the housing stock to 2050 already built, investment in retrofitting existing housing stock is critical to reducing emissions. Increasing the energy efficiency of homes can act as a driver to improve air quality and has significant health and wellbeing benefits for Londoners, particularly lower income households. In order to do that we need the government to enable local authorities to **set restrictive targets for emission controls** on various aspects of new developments and refurbishments.

We all play a vital part: national agencies, local public services, and Londoners themselves. We must therefore **help our residents and businesses to understand the issue**, its links to inequality and climate change, and how they can change their behaviour to make a positive difference and support interventions that are designed to protect their health.

We recognise that **technological development** (e.g. the ability to work from home, and travel apps) is a major factor in changing the way in which residents and businesses use transport, and that it can be an ally in addressing reducing air pollution. We also recognise that policies need to be designed so that incentives and disincentives work in tandem to create the greatest impact and support behavioural change.

2. Impact of the Coronavirus (COVID-19) pandemic

In September 2019, LEDNet and ADPH London prepared a joint position statement to set out how we should respond to this challenge, based on expertise and the available evidence. Since the statement was released, the COVID-19 pandemic (particularly the national lockdown from March to June 2020) has made a temporary improvement in air quality in the following ways:

2.1 Emissions from transport

During lockdown, NO₂ concentrations reduced significantly at busy roadside sites due to reductions in traffic flows of ~53% across London and over 60% in the central area. Overall, the mean reduction in hourly NO₂ concentrations were 21.5% across the London roads. The reductions are the difference between the average concentration from 1 January to 12 March and that from 24 March to 22 April. PM₁₀ and PM_{2.5} concentrations were higher after lockdown than at any time in 2020 to date, due to several pollution episodes driven by anticyclonic easterly flows suggestive of long-range transport. Ozone concentrations were higher post lockdown, partly due to reductions in NO_x but mainly because of pollution episodes in easterly anticyclonic air flows (KCL, 2020).

The Citymapper Mobility Index shows a huge reduction in journeys made by Londoners, through all methods, estimated from app usage and journeys tracked. At its minimum, journeys dropped to 7% of normal whilst use of London Underground services are at 10% of normal (GLA, 2020). Google's Mobility Report transit station data and Apple's Mobility Index public transport metrics show similar drops, with Google's transit station traffic currently at 53% of normal, and Apple's at 74%. The pandemic has influenced a shift in 'working from home' arrangements following national and organisation guidance. Residents of London were more likely to do some work from home than other regions of the UK. In April 2020 show that 57.2% of people in employment in London did some of their work from home, with 91.6% stating that this was because pandemic (ONS, 2020a).

2.2 Health of Londoners

Temporary health improvements were cited during first national lockdown in a survey amongst those with lung conditions conducted by the British Lung Foundation in May 2020. In London, 1038 responded to the survey, with 34% observing a significant decrease in air pollution. Of those who were asked about the impact on their symptoms for their lung condition, 735 Londoners responded with 30% saying they had seen an improvement (BLF, 2020)³.

2.3 Air pollution a risk factor for COVID-19?

Whilst the pandemic has shown a temporary positive impact on air quality amongst those with respiratory conditions, research is being conducted on long term exposure to air pollution as a potential risk factor for COVID-19 deaths. Some studies have suggested that long-term exposure to air pollution before the pandemic is associated with severe symptoms from COVID-19 and a greater risk of death, with studies in the United States (US), Northern Italy and the Netherlands finding that a small increase in pollution exposure raises the number of COVID-19 deaths (ONS, 2020b). In August 2020 compared these studies with their analysis and found that the effects of long-term exposure to air pollution on COVID-19 deaths appear smaller than reported (ONS, 2020b). This is due to other factors associated with COVID-19 deaths i.e. deprivation, population density, ethnicity, public health, and pre-existing conditions and therefore require further analysis (ONS, 2020b). More research is needed to understand this link.

³ London data was requested and provided by Asthma UK and British Lung Foundation Partnership

3. Recommendations

Our recommendations in response to this public health challenge are as follows:

1. To advocate for at least **2.5% of UK annual GDP** to be spent on tackling air quality and climate change in the UK, based on the findings of the Intergovernmental Panel on Climate Change.
2. **Capitalise on behavioural changes during COVID-19 pandemic** and protect Londoners, particularly children and young people from exposure to poor air quality, and **promote further inclusive active travel** through:
 - The [Healthy Streets Approach](#) to facilitate walking, cycling and public transport use and to discourage car usage. Initiatives like the [Streetspace for London](#) approach are taking place to encourage active travel whilst socially distancing following the COVID-19 pandemic national lockdown.
 - Taking action to mitigate pollution hotspots, particularly those around schools, including taking air quality into account when designed and refurbishing schools and providing green infrastructure barriers where appropriate. We support campaigns such as the [Idling Action Project](#).
 - Protecting vulnerable populations, including children, older people and those with heart and lung disease, by providing information about less polluted routes and alerts and advice on what to do on high pollution days.
 - Look to examples of inclusive active travel locally and share best practice across London based on gender, disability, age, ethnicity etc (see [Cycling for everyone](#) by Sustrans).
3. Support a **shared and unifying narrative** on air quality and public health impacts across London that will change the public's perception of their role in cleaning our air – including the overall benefits of physical activity to most people. This can include a campaign across London to ensure that the public understands the negative impacts of air quality on their health, how they can mitigate these effects and their individual responsibility in reducing air pollution.
4. **Restrict driving fuelled by petrol or diesel and support cleaner alternatives by:**
 - Schemes such as the [Ultra Low Emission Zone](#) (ULEZ), scrappage schemes and local schemes such as restricted and emissions-based parking, low emissions zones and building better walking and cycling infrastructure.
 - Encouraging homeworking across all sectors and communities where possible, and offer more flexibility around working from home arrangements during and beyond the COVID-19 pandemic to minimise car journeys.
 - Engaging with health and social care organisations to bring active and sustainable travel to staff, patients and visitors. Transport for London have a series of [case studies](#) to show how the NHS support patients on this matter.
5. **Support retrofitting schemes** of London's residential properties to reduce fuel poverty, address health issues caused by inefficient housing and green the economic recovery from the COVID-19 pandemic, together with associated indirect societal benefits through avoided health and social care costs.
6. **Use public sector procurement and social value action** to reduce our own contribution to air pollution, by moving faster towards ultra-low and zero emissions vehicle fleets.
7. **Speak with one voice** as boroughs to secure the resources and powers needed to reduce air pollution and protect the health of our residents.

4. How do we achieve clean air in London?

4.1 National standards, funding and governance

The Government must put in place legally binding national standards that can deliver the clean, healthy air that our residents rightly demand.

We welcome the Clean Air Strategy's intention to introduce policies that will bring the UK into compliance with the WHO standard; we call on the Government to strengthen this by introducing minimum standards to be legally adopted as national air quality objectives for PM in recognition of all the evidence pointing to the health impact of fine particulate matter PM_{2.5}. and set out a clear plan for achieving them that includes the role that councils should play. The air quality legislation that is expected to be introduced as part of the upcoming Environment Bill [2019-2021](#)⁴ will be an opportunity to clarify this situation.

Since this joint position statement was first published in September 2019, we have seen a positive step in the changes made to Schedule 12 of the Environment Bill (smoke control areas: amendments of the Clean Air Act 1993) which makes provision for:

- Imposing financial penalties for the emission of smoke in smoke control areas in England
- Offences relating to the sale and acquisition of solid fuel in England
- Applying smoke control orders to vessels in England (and authorised fuels and exempted fireplaces to be listed in Wales)

We are encouraged to see the Prime Minister's outline of the Ten Point Plan for a Green Industrial Revolution for £12 billion of Government investment to create and support up to 250,000 green jobs for transport, clean energy, nature and innovative technologies⁵. This will contribute to improved air quality and reduce the UK's contribution to climate change by 2050.

The Government must also clarify how it will fund its air quality commitments.

The Intergovernmental Panel on Climate Change have estimated that 2.5% global annual GDP will be needed to limit warming to 1.5°C, and given the close links between climate change and air quality, we are calling for at least 2.5% of UK annual GDP to be spent on tackling air quality and climate change in the UK, and for the UK government to work with other countries to secure comparable commitments (IPCC, 2018). This should include funding for the air quality responsibilities placed on councils. We are keen to play our part, but we cannot accept new unfunded burdens on the already extremely stretched local government sector. However, we believe that along with central government, the private sector and the NHS have a role to play here, recognising that preventative work to reduce air pollution has multiple health and economic benefits.

To support the delivery of these standards, the Government must also put in place an independent environmental watchdog.

Government amendments in the Committee stage following the second reading of the Environment Bill have further weakened the proposed regulator, the Office of Environmental Protection (OEP) ability to hold the government to account - this is a missed opportunity. We must have an independent environmental watchdog this adequately funded and empowered to hold the Government to account for these and other environmental targets, including through legal action, the levying of fines and the power to review and

⁴ <https://services.parliament.uk/bills/2019-21/environment.html>

⁵ <https://www.gov.uk/government/news/pm-outlines-his-ten-point-plan-for-a-green-industrial-revolution-for-250000-jobs>

require action to reduce air pollution from Government departments and other public bodies, such as Highways England. All bodies must be required to take responsibility for the air pollution under their control, but without such overarching governance, actors at regional and local level cannot be effective. The Government should also provide support to reduce emissions related to nationally significant infrastructure located in London, such as Heathrow airport. It is important that decisions over new airport capacity do not affect the UK's ability to meet EU limit values. Aviation already creates 9% of London's NO_x emissions (LAEI, 2016).

At the regional level, we support coordinated efforts between the Greater London Authority (GLA) and boroughs to lobby the Government for the funding and powers to tackle air pollution in London. We also recognise that there is a need for a shared vision and greater coordination across London's boroughs, and between boroughs, the GLA and Transport for London (TfL).

4.2 Emissions from transport

Emissions from road transport are currently the most significant source of air pollution in London. We should aim to:

- Address both 'pull factors' that can encourage use of public transport and active travel
- Make active travel safe and inclusive where possible especially during and beyond the COVID-19 pandemic
- And reduce the contribution of private and commercial vehicles through 'push' factors.

Whilst we believe ultra-low and zero emission vehicles have a role to play, evidence shows that restricting driving has the strongest, fastest and most well-evidenced benefits for reducing air pollution (PHE, 2019), in part because all vehicles contribute to particulate pollution through tyre and brake wear. This also enables us to link action on air quality to the need to address carbon emissions.

We want to see many more Londoners walking, cycling and using public transport, which will result in significant health, social, environmental and economic co-benefits.

Pre-COVID19, nearly 75% of trips currently made by car in London are walkable (TfL, 2018a). Investment, incentivisation and fiscal levers of active modes of travel, should be a priority. A new poll conducted in May 2020 on behalf of LEDNet found that most Londoners supported moves by the Mayor, Transport for London and local councils to give more space to pedestrians and cyclists. The polling, which explored Londoners' changing attitudes to travel during the COVID-19 crisis, and the potential impacts on the city's transport network once lockdown was over, found that approximately a third of Londoners said they would cycle more after lockdown, compared to their pre-crisis habits. This rose to almost half (46 per cent) for walking, running and cycling altogether.

Box 1: Enjoy Waltham Forest increases residents' 'life years' (Dajnak et al., 2018)

- The London Borough of Waltham Forest implemented measures to prioritise pedestrians and cyclists such as segregated cycle lanes, increased pocket parks and timed road closures since 2013
- Across the borough, NO₂ exposure will be reduced by up to 25% and up to 13% for particulate matter by 2020
- The population in Waltham Forest could expect to see an increase in life expectancy of around six weeks if air pollution concentrations improve as projected to 2020, compared with remaining at 2013 concentrations
- People are becoming more active by walking and cycling for longer after these changes to local streets and neighbourhoods

We call on the government to provide active travel funding to London at levels commensurate with the scale of the challenge and opportunity in London, and in line with funding to local authorities outside the capital.

As it stands, London is excluded from significant government funding for air quality improvements; this is both unjust and ineffective in terms of achieving our national targets.⁶ We support the UK Health Alliance on Climate Change's ask for the Government to increase investment in active travel to at least £10 per capita by 2020.

The Government should support local government to test new low and zero emission bus technology, including funding from the Clean Bus Technology Fund and other sources. We also welcome the Government's commitment to eliminating diesel-only trains by 2040.

Public transport in London needs to be environmentally sustainable. In London, we welcome the Mayor's commitment to making the whole bus network zero emission by 2037, but we would like to see this deadline brought forward. In the short-term, all buses operating in London should be required to meet ULEZ standards (Euro VI), not just those operating in the current ULEZ zone. Whilst we welcome the Low Emission Bus Zones, we note that many other such hotspots exist; TfL should engage with the boroughs to identify and address all such areas as we move towards a zero-emission transport network.

We urge the Mayor to adopt increasingly stringent standards for these zones, as the technology becomes available. If successful, we would like to see electric buses rolled out across the TfL fleet. Furthermore, TfL should extend their recent review of central London bus routes to outer London to increase services and ridership where there is already poor connectivity. More generally, we call for greater involvement of boroughs in bus planning, and greater transparency from TfL over bus planning processes.

In terms of place-shaping for low impact travel, much is already being done, including TfL's Mini Holland programme, which awarded £30m each to three outer London boroughs (Enfield, Kingston and Waltham Forest) to help create a network of cycle routes and improvements to the surrounding streets and public areas along these routes (GLA, 2019b). To deliver on London's aspirations – and aligning with LEDNet's joint statement with the Transport Environment Committee (LEDNet, 2019) – we are looking for the GLA to fund:

- Further join up of cycling and walking routes with high use potential; and
- Accelerated delivery of the Healthy Streets Approach within boroughs.

At local level, LEDNet and ADPH London members will work together across the whole system and with Business Improvement Districts (BIDs), to encourage locally appropriate public transport and active travel measures, including:

- Encouraging walking and cycling amongst residents through awareness-raising.
- Delivering co-implementation of measures through the planning system which can provide multiple benefits, including introduction and maintenance of green infrastructure, linking new developments to public transport nodes and ensuring that they provide links to high quality, safe walking and cycling routes and adequate cycle storage, and prioritising buses and cyclists at junctions where it can improve safety and/ or improve public transport and cycling routes; and
- Incentivising active travel modes using mobility credits and looking to link these to public health programmes or scrappage schemes.

⁶ The Walking and Cycling Investment Strategy identifies £1.2 billion available for these modes to 2020/2021, but London boroughs are not eligible because they are thought to be supported under the funding between for TfL and the Mayor of London. Similarly, public transport investment set out in the Clean Air Strategy is also not available to London boroughs, and neither is public transport or active travel funding under the £220m Clean Air Fund.

In terms of enabling local authorities to support positive transport choices, we recommend that support should be given to local authorities and private providers to develop journey planner apps that include live air pollution data, and that the impact of such apps should be evaluated.

4.3 Reducing the contribution of private and commercial vehicles to air pollution

The Government must set stronger national standards that will make private and commercial vehicles progressively cleaner and encourage significant reduction in the use of these vehicles.

This should enable us to design out emissions from our transport system at source, whilst providing support and incentives – such as scrappage schemes – to ensure that the burden of transition sits with manufacturers rather than individuals, families and businesses. Clause 73 of the Environment Bill gives the Government the power to introduce regulations to recall vehicles. We ask that they enact the regulations to recall vehicles for failures in emissions control systems. At the same time, the commitment to end the sale of new conventional petrol and diesel engine cars by 2040 should be tightened and brought forward. As proposed by the National Infrastructure Commission, the sale of new diesel HGVs should be banned no later than 2040. We note that countries like Norway, the Netherlands and India, and cities like Paris, have committed to more ambitious timescales for cleaner vehicles.

This should be complemented by effective long-term fiscal incentives to support the adoption of the cleanest private and commercial vehicles. The evidence around effective air quality interventions strongly support the introduction of national road pricing (and shows that this would have other significant co-benefits), and local road pricing such as we see in London's ULEZ. Other effective measures that should be considered together as a package include increasing fuel duty on more polluting vehicles and/ or introducing a diesel surcharge on Vehicle Exercise Duty (VED), increasing the 3% diesel surcharge under the Company Car Tax regime, supporting abatement retrofitting for vehicles already on the road, and introducing scrappage schemes.

We also strongly support calls for London to receive its fair share of VED. We strongly support the two scrappage schemes introduced by the Mayor, for vans and to support low income families. However, like the Mayor we believe that these must be complemented with a national scrappage scheme; we note that scrappage scheme can have a negative impact on inequality without careful consideration, and that this must be addressed in their design.

We recognise the Mayor's action on taxis, but it is still the case that non-ULEZ compliant taxis could still be operating in London up to 2034. This is not acceptable considering the public health challenge that air pollution represents, and we call on the Mayor to ensure that no non-ULEZ compliant taxi is operating in London beyond 2025.

In London, we believe that the ULEZ should become a Zero Emission Zone, to keep pace with technological development and achieve the highest levels of air quality.

In the long-term, we would support consideration of an integrated road pricing scheme in London, the revenues from which should be invested in the public transport and active travel. In the meantime, we offer to work with the GLA to support schemes that will improve air quality in boroughs that are outside of – or are bisected by – the ULEZ, as it expands. In parallel, the GLA and TfL should fund further low emission zones, which can deliver multiple environment and health benefits, and create a joined up strategy to deliver the modal share aim and reduce air pollution, including by recognising and reducing the very significant contribution of London's TfL-owned 'red routes.'

To complement these 'push' factors, the Government should support accelerated roll-out of charging infrastructure for low and zero emission vehicles, and we will push for an agreed strategic plan for the location of sufficient residential, car club and rapid charge points to meet projected demand, including through engagement with the Electric Vehicle Infrastructure Delivery Plan.

We want to see those businesses operating fleets taking the lead in transitioning to the lowest possible emissions in the shortest possible time, aided by funding from scrappage schemes and progressive public sector procurement. The NHS are likely to be one of the largest organisations in local areas and should be front runners in this transition. Businesses should also explore innovative methods of taking vehicles off the road and reducing congestion, for example through greater use of back-hauling, shared deliveries and local consolidation centres. All businesses should consider consolidating services such as waste and recycling collection with neighbouring businesses, or via local BIDs.

The GLA needs to use their funding routes to support these activities and action to reduce vehicle use.

In recent years, Local Implementation Plan (LIP) funding has enabled boroughs to fund a wide range of interventions, from road safety engineering to cycling facilities to parking management projects. However, the LIP budget is under constant threat of being cut in future business planning rounds. Locally led projects are precisely those that cumulatively deliver the modal shift that Londoners need to see, and we call on the Mayor to guarantee at least current levels of funding for the next three business planning rounds.

At the local level, LEDNet and ADPH London members will encourage action to reduce vehicle use, and adopt zero and low emission vehicles, including by:

- Restricting parking (for example via introducing local congestion charging, controlled parking zones, workplace parking levies, emissions-based parking permits and surcharges);
- Restricting driving via planning and development measures (for example, restricting parking availability in new developments, investing in green infrastructure, introducing coordinated Low Emission Zones and Low traffic or emission neighbourhoods, and evaluating the impact of other road alteration schemes such as phased traffic lights);
- Exploring a requirement for freight consolidation centres in areas of significant development or redevelopment, through Supplementary Planning Documents;
- Using public procurement (for example, to reduce the emissions from our own fleets and those of our contractors);
- Installing low emission charging infrastructure;
- Supporting shared mobility, including bike and car sharing schemes, which have additional health co-benefits;
- Engaging with schools and parents to reduce number of children being driven to school, for example through the introduction of school streets, and to evaluate the impacts of such schemes;
- Supporting exposure reduction programmes through planning and public engagement, which can also have a positive impact on reducing health inequalities;
- Promoting 'eco-driving' schemes (smooth driving, speed reduction and anti-idling) that supports clean air, including promoting and enforcing anti-idling; this can reduce air pollution emissions and increase safety; and
- Promoting adherence to recently published NICE guidance on air pollution, which contains recommendations based on most recent evidence (NICE, 2019).

4.4 Reducing emissions via planning and development

Nationally, planning policy and building standards should lead the way in promoting a healthy, low emission-built environment, which will also help to tackle climate change and health inequalities, as well as delivering protection from industrial emissions.⁷ Poor quality, inefficient housing creates health problems ranging from poor mental health and asthma to excess winter deaths. This winter, as COVID-19 pandemic will have negative impact on household finances, it is likely to worsen. As well as carbon reduction, retrofitting has significant co-benefits which support local and central government priorities e.g. reducing fuel poverty, addressing health issues caused by inefficient housing, or greening the economic recovery from the COVID-19 pandemic.

The forthcoming Environment Bill should require all new and replacement boilers to meet an ultra-low NO_x standard, to complement the proposed restrictions – managed at the regional level – on Combined Heat and Power and other fixed sources and enable local authorities to set restrictive targets for emission controls on various aspects of new developments and refurbishments.

We also believe that the Government should act to address emissions from buildings from wood and solid fuel burning, by enabling local authorities to declare and change smoke control areas (SCAs), making the offence under an SCA of solely not using an approved appliance or fuel (rather than basing it on visible smoke) and reforming enforcement of the Clean Air Act to make it more efficient and aligned with contemporary norms (e.g. nuisance). There is a need for the Government to apply tougher national standards, including health warnings on purchases of new appliances or fuel to help tackle the influence of PM_{2.5} urban pollution from solid fuel burning outside cities, and give more powers to local authorities to be able to ban the use or installation of appliances or fuels.

At the London level, the new draft London Plan encourages new developments to take air quality into account, by requiring that they meet the existing air quality neutral requirements; large-scale developments must be Air Quality positive. On the specific issue of gas boilers, we would like the Mayor to support new low carbon heating solutions for the capital, in collaboration with the boroughs. For example, we would welcome trials for low carbon gases, or electrified heating solutions.

Locally, we recommend that boroughs include policies in their Local Plans that set expectations for new developments – whatever their size - to mitigate air quality impacts, including via green infrastructure provision and join up.

Furthermore, all new developments should be required to ensure adequate, secure cycle storage for each new home (as stipulated in the London Plan) and they should be required to provide plug-in technology for hybrid/electric vehicles in non-car-free developments. There are many examples of where planning gain has had a positive impact on local air quality or has been used to offset potential detrimental effects to local air quality; in order to secure contributions, this approach should be set out in strategic documents such as Core Strategies and Area Action Plans for individual boroughs (see Box 2). Boroughs can also produce Supplementary Planning Documents on air quality to fully embed air quality within the planning process, since these must be considered in development proposals and can be used in determining planning applications.

⁷ There are strong synergies between air quality and energy efficiency. In addition to building standards, we therefore believe that fiscal policies could give greater weight and priority to energy efficiency in commercial and domestic properties, including through linking the Stamp Duty system to the energy performance of a dwelling to create an incentive for homebuyers to purchase a more efficient dwelling, and reforming mortgage affordability tests to better reflect the energy performance of a dwelling, and to encourage lenders to offer energy efficiency mortgages.

Box 2: Enabling clean air through planning

The London Borough of Greenwich secured:

- A 'low emission zone' for the development and construction of the Warren development;
- Strategic Travel Plan, low emission zone and air quality monitoring station secured for Greenwich Peninsula masterplan;
- Greenwich Millennium Village – emission-based parking policies; and ten electrical vehicle charging points.
- For a superstore opening in the Zone, requirement for 50% of delivery vehicles and 50% of home delivery vehicles to meet the Euro V standard.

At the same time, consideration should be given to the costs to developers, and how these can be mitigated, where appropriate. We should be supporting progressive companies to innovate, in ways that increase public benefit.

In order to be effective, air quality planning policies need to be integrated with wider policies of the Local Plan and a borough's Air Quality Action Plan. Boroughs must also enforce planning policy locally and give sufficient weight to air quality in planning negotiations. We will work with boroughs to support a review of Local Plans to identify and support greater link up through policy and officer support.

4.5 Reducing emissions from construction and industry

Emissions from Non-Road Mobile Machinery (NRMM) are the third greatest source of NO_x in London and the second largest source of PM_{2.5}; we believe that there is scope to reduce these.

At national level, we support the call for the Government to introduce local powers to set and enforce emission zones for NRMM, including construction equipment (Barrett, 2019).

This would provide much-needed extra strength to the existing NRMM Low Emission Zone in London, the effectiveness of which is constrained because it only applies to some sites and is created through planning conditions. A simpler zonal scheme would increase the effectiveness of the restrictions, make it easier and more efficient to enforce and include other significant uses of NRMM, such as road works and events.

Evidence suggests that some of the most effective methods of reducing air pollution are to require industrial developments to undertake abatement measures for both primary *and* secondary sources of dust, NO_x and sulphur dioxide, with effective inspection and enforcement regimes. Such action has additional co-benefits beyond reducing air pollution.

At London level, we believe that the GLA should expand the lane rental scheme to boroughs roads, to better allow boroughs to manage the pollution impacts of construction and roadworks. At local level, LEDNet members will work together to identify more effective methods of enforcement, including, if necessary, a review of licences and approvals to draw out best practice across the capital.

4.6 Monitoring and raising awareness of air pollution

A lack of public awareness around the sources and impacts of air pollution emission is widely acknowledged and means that it is even more challenging for people to take individual responsibility for reducing emissions. It can also prevent individuals doing all they can to protect themselves from air pollution, yet the evidence suggests that reducing exposure to emissions is a very effective public health measure. Awareness-raising and related communications measures must measurably lead to behaviour change, particularly amongst those most exposed to air pollution. But it must also support calls for change that reduce overall air pollution to safe levels. Boroughs can support this by using information more effectively, including through segmentation of our audiences. We can also build on existing good practice, such as Defra's six principles for communication about air quality (Defra and PHE, 2017).

LEDNet, ADPH London and London Councils will work together to create and drive a shared narrative that reframes sustainable travel as an easier choice, making links to wider health and wellbeing benefits. We will use messaging that reaches hearts and minds, use behavioural insights, and communicate internally, externally and across the whole system (including TfL, Public Health England, GLA and the NHS). Encouraging Londoners to make a positive shift in transport choices will drive political leadership, further resources for sustainable transport and reduce car use, creating a social movement. As part of this, we will consider whether information on air quality status and activities is readily accessible to the right people at the right times, including both residents and local authorities. We will also look at a campaign across London which ensures that the public understands the negative impacts of air quality on their health, how they can mitigate these effects and their individual responsibility in reducing air pollution.

We also commit to working in our boroughs to improve cross-departmental working to ensure that functions like transport planning deliver across multiple council priorities. We propose that air quality data should be included in Joint Strategic Needs Assessments so that Health and Wellbeing Boards, and other local partners, have the information they need to act. We will also work in partnership with TfL and the GLA to assess the impacts of Low Traffic Neighbourhoods and other similar schemes which restrict vehicle access to certain roads. As a result, we are hoping to build up an evidence base to understand the types of impacts, either positive or negative, these schemes have and allow for consistent messaging and more balanced public engagement.

There is a general lack of awareness of the health and financial benefits of energy efficiency improvements. Consequently, there is a need for a single, trusted source of information that residents can utilise to find out information and advice, with local government facilitating the information and good practice sharing.

We would encourage the NHS to raise awareness of what the general public can do to reduce exposure to air pollution, and the role they as individuals can play in reducing emissions. The Healthy London Partnership Air Quality toolkit for NHS has a range of suggestion that NHS could support taking forward to address this agenda, including monitoring air quality in and around hospitals (Healthy London Partnership, 2018).

Finally, given the scale of the problem in London, we believe central government should provide more funding to improve and maintain the current air quality monitoring network in London. And in London, the Mayor should work with boroughs that consider that the new LLAQM system would increase the reporting burden and require them to transfer funds from schemes to improve air quality.

5. About us

London Environment Directors' Network

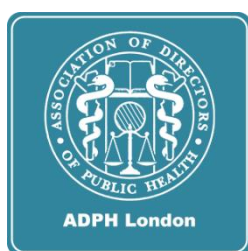
London Environment Directors' Network

LEDNET

LEDNet is the membership association for London's Environment Directors. Together, they develop research, trial new interventions and undertake policy advocacy at a regional and national level, to achieve enhanced environmental outcomes, increase adoption of best practice and successful innovation, and deliver more cost-effective

outcomes for London residents.

Association of Directors of Public Health – London



The Association of Directors of Public Health (ADPH) is the representative body for Directors of Public Health (DsPH) 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.

ADPH has published a policy position on outdoor air quality in November 2018. It has been developed in partnership with the membership and led by the ADPH Air Pollution Policy Advisory Group. We welcome an opportunity to use our national policy statement and work with LEDNet to develop this joint London Air Quality Statement.

We welcome engagement around our position statement, and you can contact:

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- Vhenekayi Nyambayo, Partnerships and Improvement Lead, London Association of Directors of Public Health (ADPH London), Vhenekayi.nyambayo@adphlondon.org.uk

6. Bibliography

- Aether (2017) *Update Analysis of Air Pollution Exposure in London*, Oxford: Aether. Available at: https://www.london.gov.uk/sites/default/files/aether_updated_london_air_pollution_exposure_final_20-2-17.pdf
- Barrett T. (2019) 'City leaders to press government on Clean Air Bill'. Available at: <https://airqualitynews.com/2019/02/14/leaders-meet-at-clean-air-summit-as-mayor-doubles-scrap-for-cash-fund/>
- BLF (2020) May Coronavirus Survey. Available at: <https://www.blf.org.uk/media-centre/press-releases/nearly-2-million-people-with-lung-conditions-notice-improved-symptoms-as>
- British Vehicle Rental and Leasing Association (BVRLA) (2019) *Mobility credits scrappage scheme*. Available at: <https://www.bvrla.co.uk/uploads/assets/uploaded/117ffa63-be62-49a1-9a518f4943eca7e4.pdf>
- Centre for London (2018) *The London Intelligence*. Available at: <http://www.centreforlondon.org/wp-content/uploads/2018/05/Issue-4-TLI.pdf>
- Community Energy London (2019) *TEC-LEDNet Joint Statement on Climate Change*. Available at: <https://www.communityenergy.london/news/2020/01/london-councils-statement-on-climate-change/>
- Dajnak D., Walton H., Stewart G., Smith J.D. and Beevers S. (2018) *Air Quality: concentrations, exposure and attitudes in Waltham Forest*. London: King's College London. Available at: <https://drive.google.com/file/d/1MGyThE5H9lgrzhCkjqKkG7vhuW6pGMR/view>
- Defra and Public Health England (PHE) (2017) *Air Quality: A Briefing for Directors of Public Health*. London: Defra. Available at: <https://laqm.defra.gov.uk/assets/63091defraairqualityguide9web.pdf>
- Fecht, D. et al., 'Associations between air pollution and socioeconomic characteristics, ethnicity and age profile of neighbourhoods in England and the Netherland', *Environmental Pollution*, Vol. 198, 201-210, 2014
- Fensterer V., Kuchenhoff H., Maier V., Wichmann H., Breitner S., Peters A., et al., 'Evaluation of the impact of low emission zone and heavy traffic ban in Munich (Germany) on the reduction of PM10 in ambient air', *International Journal of Environmental Research and Public Health* 2014; 11(5):5094–112.
- Greater London Authority (GLA) (2018a) *London Environment Strategy*, London: GLA. Available at: <https://www.london.gov.uk/what-we-do/environment/london-environment-strategy>
- GLA (2018b) *Mayor's Transport Strategy*, London: GLA. Available at: <https://www.london.gov.uk/what-we-do/transport/our-vision-transport/mayors-transport-strategy-2018>
- GLA (2018c) *Low Emission Bus Zones: evaluation of the first seven zones*, London: GLA. Available at: <https://www.london.gov.uk/WHAT-WE-DO/environment/environment-publications/low-emission-bus-zones-evaluation-first-seven-zones>
- GLA (2019a) "First month of Mayor's ULEZ sees 74 per cent of vehicles comply", 16 May 2019. Available at: <https://www.london.gov.uk/press-releases/mayoral/almost-three-quarters-complying-with-new-standards>
- GLA (2019b) 'Transforming cycling in outer boroughs: Mini-Hollands programme'. Available at: <https://www.london.gov.uk/what-we-do/transport/cycling-and-walking/transforming-cycling-outer-boroughs-mini-hollands-programme>
- GLA (2020) Coronavirus (COVID-19) Mobility Report. Available at: <https://data.london.gov.uk/dataset/coronavirus-covid-19-mobility-report>
- Harvey F. and McIntyre N. (2019) 'Pollution map reveals unsafe air quality at almost 2,000 UK sites'. Available at: <https://www.theguardian.com/environment/2019/feb/27/pollution-map-reveals-unsafe-air-quality-at-almost-2000-uk-sites>.
- Healthy London Partnership (2018) 'Toolkit for NHS Trusts: supporting the NHS to reduce its impact on air pollution'. Available at: <https://www.healthy london.org/resource/toolkit-nhs-trusts-supporting-nhs-reduce-impact-air-pollution/>
- Howard R., Beevers S. and Dajnak D. (2016) *Up in the Air: How to Solve London's Air Quality Crisis – Part II*. Available at: <https://policyexchange.org.uk/publication/up-in-the-air-how-to-solve-londons-air-quality-crisis-part-2/>
- Intergovernmental Panel on Climate Change (IPCC) (2018) *Summary for Policymakers*. In: *Global warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty* [V. Masson-Delmotte, P. Zhai, H. O. Pörtner, D. Roberts, J. Skea, P. R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J. B. R. Matthews, Y.

- Chen, X. Zhou, M. I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, T. Waterfield (eds.)). Geneva: World Meteorological Organization.
- KCL (2020) The effect of COVID-19 lockdown measures on air quality in London in 2020. Available at: https://assets.ctfassets.net/9qe818412nz4/2TM8WJU2w1cHecdkjVIRQ/2e5a91667d676b3c63f1e748156b68c4/ERG_response_to_Defra.pdf
- London Atmospheric Emissions Inventory (LAEI) 2016. Available at: <https://data.london.gov.uk/dataset/london-atmospheric-emissions-inventory--laei--2016>
- London Environment Directors' Network (LEDNet) and Transport and Environment Committee (2019) *TEC-LEDNet Joint Statement*. Available at: <https://www.londoncouncils.gov.uk/our-key-themes/environment/london-environment-directors-network/tec-lednet-joint-statement>
- London Councils (2019) '2019 Air Quality Public Polling'. Available at: <https://www.londoncouncils.gov.uk/our-key-themes/environment/air-quality-london/air-quality-public-polling>
- Laybourn-Langton L., Quilter-Pinner H. and Ho H. (2016) *Lethal and Illegal: Solving London's air pollution crisis*, London: IPPR. Available at: <https://www.ippr.org/publications/lethal-and-illegal-solving-londons-air-pollution-crisis>
- Mitchell, G. and Dorling, D. 'An environmental justice analysis of British air quality', *Environment and Planning A*, Volume 35, 909-929, 2003
- Morfeld P., Groneberg D.A., Spallek M.F. 'Effectiveness of low emission zones: Large scale analysis of changes in environmental NO, NO and NOx concentrations in 17 German cities.' *PLoS One*. 2014 Aug 12;9(8):e102999. doi: 10.1371/journal.pone.0102999. eCollection 2014.
- National Infrastructure Commission (2019) *Better delivery: the challenge for freight: freight study final report*. Available at: <https://www.nic.org.uk/publications/better-delivery-the-challenge-for-freight/>
- National Institute for Health and Care Excellence (NICE) (2019) *Air Pollution: outdoor air quality and health*. Available at: www.nice.org.uk/guidance/qs181
- NHS England (2019) *Our Vision for London*. Available at: <https://www.england.nhs.uk/london/wp-content/uploads/sites/8/2019/10/London-Vision-2019-FULL-VERSION-1.pdf>
- ONS (2020a) Coronavirus and homeworking in the UK: April 2020. Available at: <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/bulletins/coronavirusandhomeworkingintheuk/april2020#homeworking-by-ethnicity>
- ONS (2019b) Does exposure to air pollution increase the risk of dying from the coronavirus (COVID-19)? Available at: <https://www.ons.gov.uk/economy/environmentalaccounts/articles/doesexposuretoairpollutionincreasetheriskofdyingfromthecoronaviruscovid19/2020-08-13>
- PHE (2018) 'Health matters: air pollution'. Available at: <https://www.gov.uk/government/publications/health-matters-air-pollution/health-matters-air-pollution>
- PHE (2019) *Review of interventions to improve outdoor air quality and public health*, London: PHE. Available at: <https://www.gov.uk/government/publications/improving-outdoor-air-quality-and-health-review-of-interventions>
- Transport for London (TfL) (2018a) *Walking Action Plan*. Available at: <http://content.tfl.gov.uk/mts-walking-action-plan.pdf>
- TfL (2018b) *Waste consolidation: Streamlining your waste and recycling collections*, London: TfL. Available at: <http://content.tfl.gov.uk/wasteconsolidation.pdf>
- Titos G., Lyamani H., Drinovec L., Olmo F.J., Mocnik G., Alados-Arboledas A. 'Evaluation of the impact of transportation changes on air quality.' *Atmospheric Environment* 2015; 114:19–31.
- UK Health Alliance on Climate Change (2018) *Moving Beyond the Air Quality Crisis: realising the health benefits of acting on air pollution*. Available at: www.ukhealthalliance.org/wp-content/uploads/2018/10/Moving-beyond-the-Air-Quality-Crisis-4WEB-29_10-2018-final-1.pdf
- Yorifuji T., Kashima S., Doy H. 'Acute exposure to fine and coarse particulate matter and infant mortality in Tokyo, Japan (2002-2013)'. *Science of the Total Environment* 2016; 551-552:66–72
- Walton H., Dajnak D., Beevers S., Williams M., Watkiss P. and Hunt A. (2015) *Understanding the Health Impacts of Air Pollution in London*, London: King's College London. Available at: https://www.london.gov.uk/sites/default/files/HIAinLondon_KingsReport_14072015_final_0.pdf.