Air Quality Action Plan 2022-2027

Lewisham

Lewisham

#GREENER LEWISHAM

Summary

This Air Quality Action Plan (AQAP) has been produced as part of our duty to London Local Air Quality Management. It outlines the actions we will take to improve air quality in the London Borough of Lewisham between 2022 and 2027. This action plan replaces the previous plan which ran from 2016 to 2021.

This 2022-2027 AQAP has been designed in accordance with the London Local Air Quality Management (LLAQM) Policy Guidance and Technical Guidance[1]. As well as setting out plans for the next five years, it also provides an opportunity to reflect on the effectiveness of measures introduced by the 2016 to 2021 AQAP.

Additions for the 2022 to 2027 AQAP include:

- Use of the most current information available as well as resources to revise the existing measures to improve air quality across the borough. The 2019 London Atmospheric Emissions Inventory (LAEI) was published on 16 December 2021. It provides an update to the previous LAEI 2016 and a new baseline for 2019[2]. The area covered by the LAEI includes Greater London (the 32 London boroughs and the City of London), as well as areas outside Greater London up to the M25 motorway. Projections for the years 2025 and 2030 are also being produced and these will be available in spring 2022. The bespoke borough maps presented in this plan will be updated when new data becomes available in spring 2022.
- Quantification of the impacts of proposed measures wherever possible – including data on emissions and concentrations obtained locally, as well as published modelled statistical data.
- Consideration of measures to monitor and evaluate the effectiveness of the plan.
- Clear delivery objectives, including key milestones, timescales and expected outcomes for LBL and other delivery partners.
- Stating how LBL, including its transport, planning and public health departments, and its external delivery partners, will take ownership of dealing with air quality issues and how we will work together to deliver the AQAP's defined objectives.
- Setting up clear governance and ownership by the borough, which extends to all parts of the AQAP, and includes all contributing departments and corporate.
- Maintain measures that can deliver the required level of emissions reductions to meet air quality objectives within clearly defined timescales that are acceptable to the GLA.

During the course of the 2016 - 2021 AQAP, the Council's key priorities included:

[1] https://www.london.gov.uk/what-we-do/environment/pollution-and-air-quality/working-london-boroughs

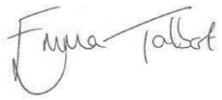
[2] https://data.london.gov.uk/dataset/london-atmospheric-emissions-inventory--laei--2019

- Reducing car use and making walking, cycling and public transport our preferred choice of travel. Where the car needed to be used, we promoted car clubs and zero emission vehicles.
- Reducing children's exposure to poor air quality and building on the anti-idling schools programme.
- Working with businesses to make changes to deliveries and construction and;
- Encouraging the use of technology to be better informed to take decisive action.

Since the adoption of the previous action plan in 2016, there has been significant progress made to improve air quality in Lewisham as reported in our annual status reports[3] available on our website.

Council priorities have been on behavioural change and providing a focused approach with children, schools, transport and infrastructure projects.

This AQAP has been approved by:

Name of Council member	**Name**	**e-signatures**	**Date**
Cabinet Member for Environment and Climate Action	Cllr Louise Krupski		12.07.2022
Director of Public Health	Dr Catherine Mbema		13.07.2022
Director of Planning	Emma Talbot		29.07.2022
Director of Public Realm	Zahur Khan		15.07.2022
Executive Director for Housing, Regeneration and Public Realm	Jennifer Daothong		26.07.2022
Executive Director for Community Services	Tom Brown		11.07.2022

[3] *https://lewisham.gov.uk/myservices/environment/air-pollution/read-our-air-quality-action-plan-and-other-reports*

This AQAP will be subject to annual review, appraisal of progress and reporting to Lewisham Health Protection Committee and Lewisham Strategic Air Quality Board.

Progress each year will be reported in the Annual Status Reports, as part of our statutory London Local Air Quality Management duties.

All reporting will be carried out in accordance with the current COVID-19 Department for Environment, Food and Rural Affairs (Defra) and the GLA guidance.

If you have any comments on this AQAP please send them to Dr Eliane Scholastiq, Foteu Madio at:

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environmentalprotection@lewisham.gov.uk.

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Abbreviations

AQ	Air Quality
AQAP	Air Quality Action Plan
AQFA	Air Quality Focus Area
AQG	Air Quality Guideline
AQMA	Air Quality Management Area
AQN	Air Quality Neutral
AQO	Air Quality Objective
BEB	Buildings Emission Benchmark
BREEAM	Building Research Establishment Environmental Assessment Method
BEIS	Department for Business, Energy and Industrial Strategy
BLEN	Business Low Emission Neighbourhood
BTL	Bakerloo Tube Line
CAB	Cleaner Air Borough
CAV	Cleaner Air Villages
CAZ	Central Activity Zone
CEMP	Construction Environmental Management Plan
CEO	Civil Enforcement Officer
CHP	Combined Heat and Power
CP	Charge Point
CPZ	Controlled Parking Zone
CRP	Cross River Partnership
DEC	Design Engineer Construction
DEFRA	Department for Environment, Food and Rural Affairs
DMT	Departmental Management Team
DMLP	Development Management Local Plan
DPH	Director(s) of Public Health
DSP	Delivery and Servicing Plan
EP	Environmental Protection
EPC	Energy Performance Certificate
ERG	King's Environmental Research Group
EV	Electric Vehicle
FORS	Fleet Operator Recognition Scheme
GLA	Greater London Authority
GULCS	Go Ultra Low City Scheme

HGV	Heavy Goods Vehicles
HMO	Homes in multiple occupation
HPC	Health Protection Committee
IT	Interim Target
JNSA	Joint Strategic Needs Assessment
KPI	Key Performance Indicator
LAEI	London Atmospheric Emissions Inventory
LAQM	Local Air Quality Management
LBL	London Borough of Lewisham
LBoC	London Borough of Culture
LDF	Lewisham Local Development Framework
LEN	Low Emission Neighbourhoods
LLAQM	London Local Air Quality Management
LTN	Low Traffic Neighbourhood
NCIL	Neighbourhood Community Infrastructure Levy (NCIL)
NRMM	Non-Road Mobile Machinery
MAQF	Mayor's Air Quality Fund
PM_{10}	Particulate matter less than 10 micron in diameter
$PM_{2.5}$	Particulate matter less than 2.5 micron in diameter
PNC	Penalty Charge Notice
PSV	Public Service Vehicle
OLEV	Office for Low Emission Vehicles
TEB	Transport Emissions Benchmark
TfL	Transport for London
SPDs	Supplementary planning documents
STARS	Sustainable Travel: Active, Responsible, Safe
UHL	University Hospital London
ULEZ	Ultra-Low Emissions Zone
WHO	World Health Organisation

Foreword from Cllr Louise Krupski, Cabinet Member for Environment and Climate Action

We would like to thank all those whose engagement has helped shape the actions presented in this plan. Lewisham's Air Quality Action Plan is central to the Council's commitment to improve air quality in the borough over the next five years, from 2022 to 2027.

Lewisham's Climate Emergency Action Plan, approved by the Mayor and Cabinet in 2020, includes a range of measures across the Council's corporate estate, housing, transport and green spaces, with the ambitious aim of Lewisham being carbon neutral by 2030. Tackling air quality, which will improve the environment and reduce carbon emissions, is integral to that goal. The case for clean air and healthy environments however, is not only a response to the Climate Emergency but a positive chance to create a vision of Lewisham that is greener, better for mental and physical health and less congested by traffic.

This air quality action plan outlines what the Council will do to reduce concentrations of, and exposure to, air pollution through nation-wide partnerships. It is our aim to protect and improve the boroughs' health, wellbeing, and reduce health inequalities. This work will further support local and national government's work on improving air quality. The UK Clean Air Strategy, which was published in January 2019, sets out plans to meet ambitious legally-binding targets to reduce emissions of the five most damaging air pollutants by 2020 and 2030. It will be replaced by a newer version due this year, and the wider Environment Bill. Lewisham council strongly supports the ambitious air quality targets set by the WHO and towards which, along with the Mayor of London, this report takes its lead.

Air quality has a major impact on the health and quality of life of residents and visitors to the borough. Air pollution can have a detrimental effect on people's health, especially our most vulnerable citizens; children, the elderly and people with existing health conditions. The Council has made important strides in improving air quality in the borough in recent years but we know there is more that needs to be done. We want to work with residents, local businesses and our London partners to make Lewisham a cleaner, greener, healthier place to live, work and visit.

The persistent rise of car use, air travel and construction among other activities means air quality remains a major issue for the public's health. In accordance with Public Health England in 2020, walking, cycling and other forms of active travel are essential for improving health and reducing air pollution, but too often people are put off by the risk of exposure to high concentrations of pollutants. With an estimated effect equivalent to 28,000 – 36,000 deaths each year attributable to human-made air pollution in the UK, more action is needed at all levels to address this unacceptable,

serious and avoidable source of harm to our health. We all have a role to play in helping to make sure that the air that we, and future generations, breathe is clean air.

We have considered measures and actions in terms of costs, effectiveness, time-scales and feasibility of implementation. We cannot guarantee that we will be able to take action immediately on every measure but we will work hard to fulfil the aims and objectives of this plan which will be reviewed again in 2027.

Name of Council member	**Name**	**e-signatures**	**Date**
Cabinet Member for Environment and Climate Action	Cllr Louise Krupski		15.07.2022

Introduction

This report outlines the actions that LBL will deliver between 2022 and 2027 to reduce concentrations of pollution, and exposure to pollution. This will positively impact on the health and quality of life of residents and visitors to the borough.

The action plan is a legal requirement on the local authority to work towards air quality objectives under Part IV of the Environment Act 1995 and relevant regulations made under that part and to meet the requirements of the London Local Air Quality Management statutory process[4].

COVID-19 pandemic and new compendium

The coronavirus (COVID-19) pandemic put considerable pressure on the Environmental Health/ Environmental Protection resources of all local authorities, including Lewisham. At the same time, there has been a great deal of media and political attention on the health impacts of poor air quality, and growing evidence of links between air quality and higher COVID-19 infection and mortality rates.

Addressing these challenges, in addition to its ongoing responsibilities, has left many local authority teams stretched to capacity. Another important factor to note is that there has been a general decrease in concentrations of NO_2 across Lewisham during 2020 due to reductions in movement as a result of lockdowns. This reduction in Lewisham was corroborated by an assessment carried out by Imperial College London into air pollution across London. However, vehicle use has reverted to pre-pandemic levels in many places in London and unless appropriate steps are taken there is a risk

[4] LLAQM Policy and Technical Guidance. https://www.london.gov.uk/what-we-do/environment/pollution-and-air-quality/working-boroughs

of this increasing further. Additionally, although levels of NO_2 and Particulate Matter have reduced across London as a result of the Ultra-Low Emission zone and other measures, we are still a long way from meeting the new heath-based World Health Organization targets for these pollutants.

Main achievements during the course of the Lewisham AQAP 2016 to 2021

Air quality and climate emergency - improving air quality as part of an integrated approach to dealing with the climate emergency.

Local government has been at the forefront of a call for sustained and significant action on climate change. The ambitious climate emergency targets and plans set by LBL, alongside organisations and bodies across the country, are among the first steps in the response to the climate and ecological crisis that has resulted from global inaction and ignoring the problems.

The impetus for change is that the demand for action on the climate crisis has come from citizens, and particularly young people, locally, nationally and internationally. This call for action is grounded in a greater understanding of the connections between the local environment, the quality of our open spaces and the air we breathe, and sustainability at a global level.

Meeting this challenge will fundamentally change how we live. However it does not have to be about giving things up. Instead it can enrich our lives. Taking strong action on energy, carbon and our environment means our air will be cleaner, we'll feel healthier, and we'll live in environments with green spaces, rich with diversity.

Lewisham's Climate Emergency Action Plan[5] was approved by the Mayor and Cabinet in 2020 and includes a range of radical actions across the Council's corporate estate, housing, transport and green spaces intended to support delivery of the ambition for Lewisham to be carbon neutral by 2030.

Carbon dioxide is not, in itself, considered a primary pollutant in terms of air quality, but the main sources of carbon at a local level, particularly in urban environments, are energy use in the home and transport. These are also key determinants of local air quality.

This means that many of the actions to cut harmful pollutants, such as improving green infrastructure or moving to cleaner, renewable energy sources, will also deliver on our climate commitments. There are also strong connections between the air quality focus areas located in the north of the borough and our plans for zero carbon infrastructure, identified in our Strategy Heat Network map.

[5] *https://councilmeetings.lewisham.gov.uk/mgAi.aspx?ID=26629*

Carbon emissions in Lewisham have been falling. National data shows emissions in the borough have dropped by 100,000 tonnes in the last 4 years[6]. Our ambition is to accelerate this reduction by delivering on Lewisham's Climate Emergency Action Plan.

Recent achievements in this work include:

- Securing more than £5m external funding in 2020/21 for carbon reduction, fuel poverty and flooding projects.

- Delivery of 11 local community projects in schools and community organisations through Lewisham's Community Energy Fund, funding solar panels, lighting improvements, feasibility studies, community engagement work and a zero carbon school project.

- We are consulting on a new Core Strategy that sets standards for new developments in line with our climate ambitions.

- The energy master plan we have published provides the evidence base to decarbonise the next generation of developments in the borough.

- Switching to 100% renewable electricity to power our corporate buildings and schools, installing new recycling facilities in Laurence House and investing in improvements to lighting and heating in the building.

- Changing our procurement policy to include social value in decision making on contracts above £50k and refocusing the Council's pension fund to move away from high carbon investment.

- Lewisham's successful Borough of Culture bid, Cultural Activism, sets out plans to inspire local people to take action on climate change in 2022.

On 11 February 2020, the Mayor of London announced that Lewisham has been awarded the title of London Borough of Culture for 2021 (due to the Covid-19 pandemic, LBL's year as Borough of Culture was moved to 2022). LBL was awarded £1.35m funding to deliver a year-long programme of activities that will place culture at the heart of their communities and celebrate the unique character of local people and places.

Actions on climate change with the Borough of Culture will include:

- **Climate Carnival:** We will host the world's first 'tag' carnival, showcasing the power of culture to highlight climate issues, increase understanding, promote debate and stimulate action within our communities.

6 *https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/894787/2005-18-uk-local-regional-co2-emissions.xlsx*

- **Climate Commission:** We will commission a large-scale outdoor performance or installation in Lewisham designed to inspire residents into action.
- **Climate Home:** Our young people will help design, build and then perform in their own carbon-neutral theatre.
- **Artist of Change:** We will embed an artist in our Climate Emergency team to work with communities to explore creative solutions to the climate emergency.

Air Quality monitoring, trends and Core Statutory duties - Lewisham has two Air Quality Management Areas (AQMAs) [7]which cover most of the borough apart from the south eastern part.

In 2018, we increased our existing diffusion tube network from 36 to 50 sites and in September 2020, added 51 temporary monitoring sites for our Low Traffic Neighbourhood (LTN) project[8].

In 2018, we increased our continuous monitoring units from three to four. These stations monitor automatically a variety of pollutants including Nitrogen Dioxide (NO_2) as detailed in the following section. With the additional Particulate Matter (PM), a monitoring site in Deptford (LW5) joins existing sites in Catford (LW1), Lewisham (LW4) and New Cross (LW2).

The previous LW1-Catford site (now LW6) measuring Nitrogen Dioxide (NO_2), was relocated in November 2021 to Laurence House, 1 Catford Road. This relocation was due ongoing refurbishment works that were likely to interfere with the monitoring equipment.

LBL contributed towards the installation of a state of the art Air Quality Supersite (HP1), at Honor Oak Park Sports Ground, managed by the Environmental Research Group at Kings College, London. This is one of only three sites in the UK and the only one in London. We will continue to look for opportunities to expand our air quality monitoring around the borough and support scientific research to better understand the problem and solutions.

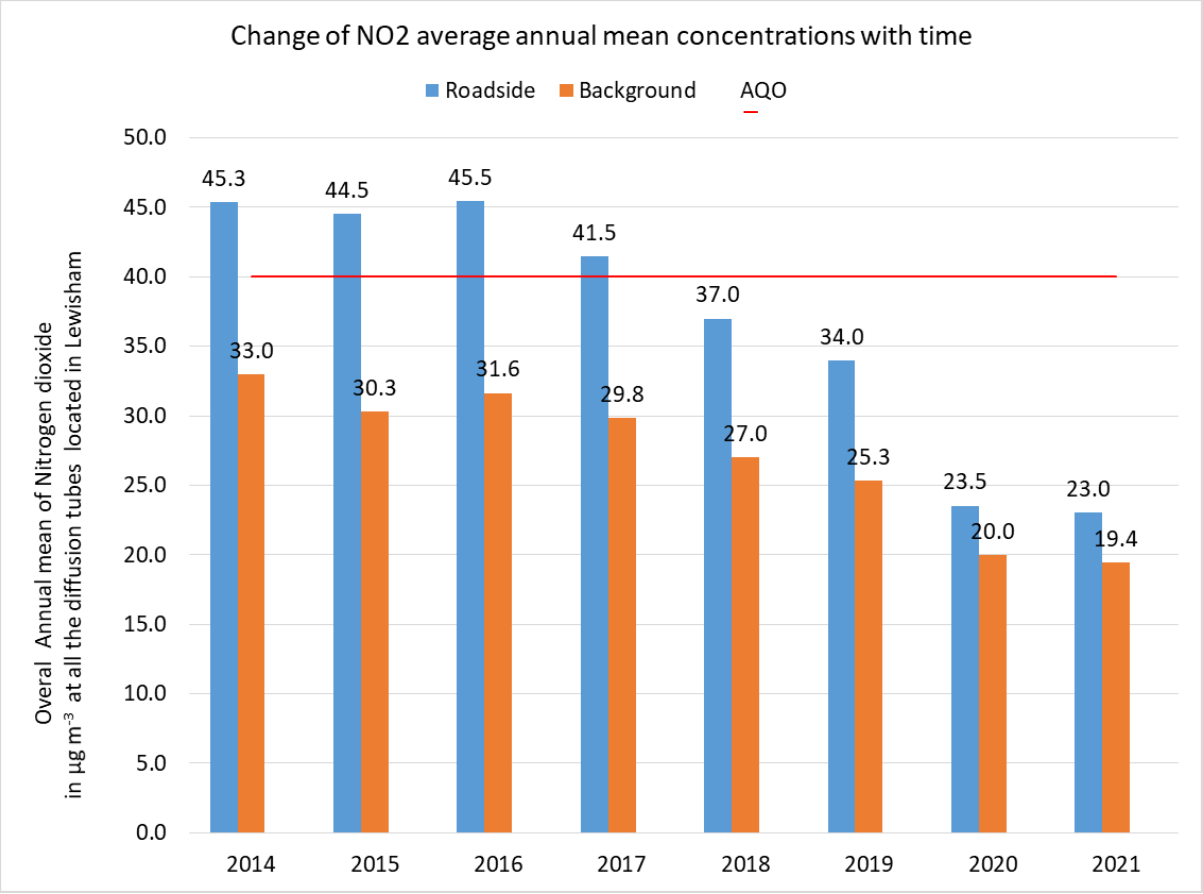
Full information about our current monitors, monitoring regimes, and outcomes is available via our website[9] along with air quality forecasts for Lewisham and London.

Nitrogen Dioxide (NO_2) is part of a group of gaseous air pollutants (nitrous oxides), and in Lewisham is primarily produced by road transport. The health effects of exposure include an irritation of airways with respiratory symptoms such as shortness

[7] *https://uk-air.defra.gov.uk/aqma/*
[8] *https://lewisham.gov.uk/articles/news/changes-to-lewisham-and-lee-green-low-traffic-neighbourhood-announced*
[9] *https://lewisham.gov.uk/myservices/environment/air-pollution/check-air-quality-levels*

of breath and cough. NO_2 inflames the lining of the lungs and can increase asthma symptoms at high concentration[10].

As shown in our 2020-2022 Annual Status Reports[11], the results of the most current diffusion tube monitoring regime and from our four automatic stations show no ratified annual average NO_2 concentrations in excess of 40µg m^{-3}. The 2021 annual mean NO_2 concentrations at automatic monitoring sites overall exhibited a continuation of the decreasing trend observed over the seven-year period between 2015 to 2021. For the sites LW1, LW2 and LW4, the average decrease was 34% for the seven-year period. Over the last eight years, annual mean NO_2 concentrations at all diffusion tube urban background sites have remained below the annual mean NO_2 AQO of 40 µg m^{-3}. The locations that have exceeded the Air Quality Objective (AQO) throughout the 2014 to 2019 period have consistently been roadside sites. As shown on the following graphs (Figure 1), on average, annual mean NO_2 concentrations at both roadside and urban background monitoring locations have decreased between 2015 and 2021 by an average of 42% and 34% respectively for the seven-year period.



[10] *https://www.blf.org.uk/support-for-you/air-pollution/types*
[11] *https://lewisham.gov.uk/myservices/environment/air-pollution/check-air-quality-levels*

Figure 1Trend of overall NO_2 annual mean concentration (in µg m^{-3}) with time

Note: The overall NO_2 annual mean concentrations was estimated by averaging the yearly concentrations for roadside and background sites. A simple linear regression models was then used to show the relationship between the concentration of annual mean concentrations and time. The linear regressions show decrease in NO_2 with time at all the sites. The R-Square was 0.89 for overall background sites and 0.90 for roadsides. It can be seen that the largest difference between two years was the reduction in concentrations between 2019 and 2020 probable due to the impact of travel restriction imposed by the Government to limit the spread of COVID-19. The curves of individual exploratory sites are presented in the 2022 Annual Status Report available on our website. The current air quality objective (AQO) is 40 µg m^{-3}.

Particulate matter (PM) refers to all liquid and solid particles in the air. It comprises a huge variety of chemical compounds and materials, some of which can be toxic. Due to the small size of many of the particles that form PM, some of these toxins may enter the bloodstream and be transported around the body, lodging in the heart, brain and other organs[12]. Therefore, exposure to PM can result in serious impacts to health, especially in vulnerable groups of people such as the young, elderly, and those with respiratory problems[13]. Based on the latest evidence on the effects of PM to health[14] the UK monitors the concentration of particles less than 10 micrometres in diameter (PM_{10}) and less than 2.5 micrometres in diameter ($PM_{2.5}$).

PM_{10}- monitoring of PM_{10} concentration is carried out via two automatic stations (Lewisham and New Cross) and there are no exceedances of the PM_{10} annual mean Air Quality Strategy Objective, which is 40µg m^{-3}, and monitors across Lewisham have generally shown good improvement over the last eight years. Three automatic monitoring stations within LBL measure PM_{10}. In 2021, all three sites demonstrated annual mean PM_{10} concentrations well below the AQO of 40 µg m^{-3}. Over the entire seven-year period between 2015 and 2021, all three monitoring stations showed an overall downward tendency with some fluctuations.

$PM_{2.5}$-these particles are harmful to human health in all concentrations. $PM_{2.5}$ is monitored at two of our automatic stations, New Cross and Deptford, and at the Honor Oak Park site within Lewisham. No exceedance of $PM_{2.5}$ legal limits, which are appended to this report, has been noted. However these limits are significantly less

[12] https://www.gov.uk/government/statistics/emissions-of-air-pollutants/emissions-of-air-pollutants-in-the-uk-particulate-matter-pm10-and-pm25
[13] https://www.gov.uk/government/statistics/emissions-of-air-pollutants/emissions-of-air-pollutants-in-the-uk-particulate-matter-pm10-and-pm25
[14] https://laqm.defra.gov.uk/public-health/pm25.html

stringent than the recommended World Health Organization (WHO) guidelines.[15] The Mayor of London has adopted a target to meet limits for $PM_{2.5}$ by 2030 (i.e. annual mean concentration of 10 micrograms per cubic metre of air (μg m^{-3})) [16]and asked boroughs (as detailed in the document named '$PM_{2.5}$ in London: Roadmap'), to meet WHO guidelines by 2030.

In 2020, all three sites achieved annual mean $PM_{2.5}$ concentrations below the annual mean old $PM_{2.5}$ AQO value of 25 μg m^{-3}. All concentrations recorded at New Cross have been above the WHO guidance of 10 μg m^{-3} since 2014. Lewisham Deptford (2019), and Honor Oak Park (2020) show concentrations below all objectives.

The significant increase in monitoring outlined above and the decreasing in pollutant concentrations since 2014 is testament to the commitment of LBL to increasing its understanding of air pollution, as well as demonstrating the effectiveness and impact of the LLAQM system in helping fulfil our statutory duty to work with all stakeholders to tackle air quality in the borough.

Recent Greater London Authority analysis outlines the success of policies such as the central London Ultra Low Emission Zone (ULEZ), cleaner buses and electric taxis[17]. However, there is still a long way to go until Londoners breathe clean air as tens of thousands continue to live in areas with illegally polluted air[18] and 99 per cent of London, and Lewisham, still exceeds World Health Organization recommended limits[19]. Local action is required to complement regional measures and target NO_2 pollution hotspots. Furthermore, although Lewisham and London are meeting legal $PM_{2.5}$ limits, we are still a long way off meeting the WHO's health-based limits for $PM_{2.5}$. Concerted action is required across all levels of Government to achieve the Mayor's goal of meeting the WHO limits for $PM_{2.5}$ by 2030.

Pollutants, such as nitrogen dioxide (NO_2) and particulate matter (PM), are now known to be non-threshold – i.e. there is no clear evidence of a safe level of exposure below which there is no risk of adverse health effects[20].

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[15] https://www.euro.who.int/en/health-topics/environment-and-health/air-quality/activities/update-of-who-global-air-quality-guidelines
[16] https://www.london.gov.uk/WHAT-WE-DO/environment/environment-publications/pm25-london-roadmap-meeting-who-guidelines-2030#
[17] https://www.london.gov.uk/press-releases/mayoral/dramatic-improvement-in-londons-air-quality.
[18] https://www.london.gov.uk/press-releases/mayoral/dramatic-improvement-in-londons-air-quality
[19] https://www.who.int/news-room/fact-sheets/detail/ambient-(outdoor)-air-quality-and-health#:~:text=%22WHO%20air%20quality%20guidelines%22%20estimate,related%20deaths%20by%20around%2015%25.
[20] https://www.gov.uk/government/publications/health-matters-air-pollution/health-matters-air-pollution

New WHO Global Air Quality Guidelines (AQGs)[21] published in September 2021 provides clear evidence of the damage air pollution inflicts on human health, at even lower concentrations than previously understood. The guidelines recommend tighter air quality levels to protect the health of populations, by reducing levels of key air pollutants, some of which also contribute to climate change. Whilst not legally-binding, like all WHO guidelines, AQGs are an evidence-informed tool for policy-makers to guide legislation and policies, in order to reduce levels of air pollutants and decrease the burden of disease that results from exposure to air pollution worldwide. Conscious that this will be a difficult task for many countries and regions struggling with high air pollution levels, WHO has proposed interim targets (IT) to facilitate stepwise improvement in air quality and thus gradual, but meaningful, health benefits for the population.

Air quality in Lewisham does currently breach those guidelines, however air quality is largely within the EU legal limits which the UK currently adheres to. But most of the Lewisham measured annual concentrations of NO_2 for example are above the WHO Air Quality Guideline of 10 µg m^{-3}. Pending the new UK air quality strategy, due at the end of 2022, which should include new UK recommended guidance, LBL will be designing a timescale of achieving each of the interim targets, which levels for (NO_2) are 40,30, 20 µg m^{-3} for interim targets 1, 2 and 3. An assessment of the NO_2 and PM Concentrations against the new AQGs and targets have been appended to this plan for your own assessment and review.

Emissions from developments and buildings: We continue to regulate, help manage and reduce emissions from developments and buildings by using planning powers to enforce air quality measures, cut emissions, increase energy efficiency and by the adoption of Planning Policy that encourages car-free developments.

Lewisham is part of the Pan London Non Road Mechanical Machinery (NRMM) project which aims to reduce emissions from construction sites. Almost all major planning applications are now subject to Non Road Mobile Machinery, air quality and dust conditions.

Public Health and Awareness Raising: We carry out actions to reinforce our ongoing political commitment to air quality and the importance of our engagement in promotion of better air quality and raising health awareness.

Several actions have been carried out through the quarterly Air Quality Working Groups, with Cllr Louise Krupski and Cllr Sophie McGeevor, former Cabinet member for environment, in attendance, and quarterly Strategic Air Quality Board with heads of service in attendance.

One example is the design of the School Air Quality Action Plan. Also our Annual Status report has been taken to the Health Protection Board for sign off, in addition to

[21] *https://apps.who.int/iris/handle/10665/345329*

the Departmental Management Team (DMT). This is now part of our corporate governance.

Lewisham's Public Health team is leading on promotional work, through the medical profession, to raise awareness among those with respiratory issues about the effects of poor air quality. Lewisham was one of the first boroughs to launch its 'Lewisham Air App'. It is hoped that GPs and respiratory nurses will encourage use of the App among patients with Chronic Obstructive Pulmonary Disease (COPD) and asthma and also to those who provide care for residents with such conditions. The Lewisham Air App allows residents to plot low pollution routes, receive air pollution notifications and monitor air quality and air pollution in real-time.

We will use several readily available resources, such as GLA pollution alerts, airText and Imperial College's London Air webpage, to raise awareness of the health impacts of air quality and monitor these impacts more closely.

We encouraged everyone living, working or visiting the borough to help reduce air pollution across the borough to sign our clean air pledge and commit to do at least one of these actions to help improve air quality:

- Walk, cycle or use public transport instead of driving your car
- Download the Lewisham Air app to get air quality news and alerts
- Make your next car an electric or hybrid, or join a car club
- Walk your children to school
- Switch off your car engine when you are stationary, loading or waiting
- Use approved appliances and fuel for heating
- Avoid using the car and where possible use alternative ways of getting around the borough
- Walk and make the most of cleaner and greener more pleasant routes and
- Encourage parents to become an air quality champion in their child's school.[22]

Like most London boroughs, vehicle idling is an issue in Lewisham. Several campaigns have been launched to reduce unnecessary engine idling by raising awareness of how harmful toxic pollution can be to human health[23]. A London-wide anti-idling campaign was launched in 2019 and on 22 February 2021 there was the launch of a new London-wide anti-idling marketing campaign "Engines Off. Every Stop". These campaigns are part of the Idling Action London project, funded through the Mayor's Air Quality Fund.

On 18 September 2019, the Mayor and Cabinet agreed to introduce a traffic management order (TMO) that allows enforcement action against drivers who are caught idling. This applied to all roads in the borough and started in January 2020.

[22] *https://lewisham.gov.uk/myservices/environment/air-pollution/register-your-interest-in-becoming-an-air-quality-champion-at-your-child-s-school*
[23] *https://idlingaction.london/*

From this date, Civil Enforcement Officers are able to enforce where drivers are idling their vehicles through Penalty Charge Notice (PCN)[24].

Lewisham has also continued raising awareness on this important issue through school programmes and encourage everyone living, working, and visiting Lewisham to reduce car usage and make walking, and cycling and public transport a preferred choice of travel. Cllr Yemesi Anifowose has been appointed as our new Air Quality Champion, and will be actively engaging with the community, schools and construction companies to help reduce air pollution across the borough.

Examples of engagement:

- The Evelyn Street Corridor Forum
- Clean Air Days
- National Clean Air Summit
- Deptford Folk
- Lewisham People's Day
- School Superzones Project
- Anti-idling school events
- GLA meetings
- Westminster Briefing on Air Quality
- Meetings around specific schemes implemented by the council to reduce air pollution
- The Lee Green Assembly
- Implementation of the Lewisham and Lee Green Low Traffic Neighbourhood (LTN)
- Events around the future of a traffic-free city and
- Meetings for the Dartford consolidation centre with Cross River Partnership.

School actions: We have been working with the GLA, local head teachers, parents and all relevant stakeholders to identify actions to reduce exposure to poor air quality around schools. We have focused on actions around schools, looking particularly at sustainable transport commitments and idling action including:

- We compiled a draft School Air Quality Action Plan due to be adopted and are working with local head teachers and parents to reduce air pollution around schools.
- We appointed Air Quality Champions. These volunteers are promoting the key message of anti-idling and helping run anti-idling events at schools.
- TFL's STAR (Sustainable Travel Accredited and Recognised) status is awarded to schools that show a commitment to their school travel plan[25].

[24] https://lewisham.gov.uk/articles/news/our-drive-to-improve-air-quality-forges-ahead-with-new-measures-to-tackle-idling-vehicles
[25] https://lewisham.gov.uk/myservices/roads-and-transport/sustainable-transport/setting-up-a-school-travel-plan

Almost 60 secondary schools were awarded Gold[26] status between in 2017 and 2019.

- Fifty London School audits were funded with £250,000 from the Mayor's Air Quality Fund. The Mayor also invested £250,000 to pilot the audit concept in 20 nurseries in London's most polluted areas[27]. Following the audits at school and nurseries, recommendations were made to reduce emissions and exposure. In Lewisham this work included three schools audits (Deptford Park Primary School, Haseltine Primary School and St James Hatcham Primary School) and two nurseries audits (NAQA Clyde Nursery School and NAQA Kay Rowe Nursery School). As part of the scheme, the Council helped to install green 'living walls' around these schools.
- Implementing a programme of School Streets (closing roads to traffic at school drop off and pick up times) [28]. This includes physical measures introduced to the street to discourage car use during school drop off and pick up times. The scheme also aims to tackle congestion, improve air quality at the school gates, make it easier and safer to walk and cycle to school and create a friendlier and calmer environment for everyone.
- Other school projects include green infrastructure, cleaner transport and trialling an indoor air filtration system.

Cleaner Transport. A range of actions have been implemented in the last few years, including the creation of more and improved pedestrian spaces on high streets, enhanced cycle routes, more cycle parking, school streets, a low traffic neighbourhood and other traffic reduction measures, speed compliance measures, bus priority schemes, electric vehicle charging points, cargo bike schemes, car free days, and a comprehensive road safety education programme.

These measures have encouraged behavioural change away from car use and towards more sustainable or efficient forms of transport, such as walking and cycling, or cargo cycles for movement of goods.

However, it is recognised that not every journey can be made on foot or by bike, and where car use is necessary, a shift to electric vehicles is encouraged through the ongoing expansion of our charging network. There have also been actions around improving parking policy to provide incentives for low emission vehicles.

Several Local Implementation Plan (LIP3) projects undertaken in Lewisham and in our Air Quality Focus Areas are briefly summarised in this section and in section 1 of this plan. These include:

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[26] https://stars.tfl.gov.uk/About/Accreditation

[27] https://www.london.gov.uk/what-we-do/environment/pollution-and-air-quality/mayors-school-air-quality-audit-programme

[28] https://lewisham.gov.uk/myservices/roads-and-transport/closing-roads-to-traffic-at-school-drop-off-and-pick-up-time-school-streets

- Adoption and publication of the Low Emission Vehicle Charging Strategy to ensure that everyone in the borough is no further than 500m from an electric vehicle charge point by 2022. Then expansion of the electric vehicle charging points throughout the borough to 200 plus.
- Introduction of 20 mph speed limit on all Air Quality Focus Areas and most of Lewisham's major roads
- Adoption and publication of our parking policy in the borough that will see the most polluting vehicles paying the most for parking permits
- Reduction of emissions in our fleet vehicle selection
- Pedestrianisation of Prince Street and Scawen Road (outside Francis Drake School) as well as four Copenhagen crossings on Crook Road, Avignon Road, Kezia Street and Etta Street and;
- Introduce traffic reduction and increase walking and cycling through the Deptford Parks Liveability Neighbourhood, Healthy Neighbourhoods, Cycleway and other planning development initiatives.

A variety of measures have been introduced in response to the COVID pandemic to help support social distancing and create a safer environment for those travelling on foot or by bike. This includes the creation of more space for pedestrians on high streets, the installation of the borough's first parklet, a low traffic neighbourhood, a number of other modal filters and school streets. We have seen many residents take advantage of the quieter conditions during lockdown and reduce the use of their cars. We believe that other improvements being made will encourage people to continue to make more journeys by foot or bicycle.

The School Streets initiative has seen physical measures introduced to these streets to stop car use during school drop off and pick up times. The scheme also aims to tackle congestion, improve air quality at the school gates, make it easier and safer to walk and cycle to school and create a friendlier and calmer environment for everyone. So far, 47 school streets have been put in place, with more to follow, subject to funding.

Delivery servicing and freight. We are managing the impact on air quality of delivery services, with the re-organisation of freight delivery, prioritising loading for ultra-low emission delivery vehicles and making progress on the Council's own move to low emission vehicle use.

Air Quality Focus Areas. The 2016-2021 plan included additional actions around specific project within areas of high air pollution, with funding from the Department for Environment, Food and Rural Affairs (Defra)[29] and Mayor's Air Quality Fund (MAQF)[30].

LBL is part of the Cross River Partnership (CRP) coordinated series of Clean Air Villages (CAV)[31]. This Defra funded project promotes air quality-related behaviour

[29] *https://www.gov.uk/government/collections/air-quality-grant-programme*
[30] *https://www.london.gov.uk/what-we-do/environment/pollution-and-air-quality/mayors-air-quality-fund*
[31] *https://crossriverpartnership.org/projects/#current*

change from a wider community perspective, including residential and commercial transport and travel.

Some of the most recent projects undertaken as part of CAV include improving air quality through engagement with local stakeholders, such as healthcare providers, businesses and community groups around Deptford High Street.

In March 2021, Defra awarded further funding to London authorities, including Lewisham, for a CAV engagement and behaviour change project that will implement a range of freight solutions.

Greener Environment: A new Strategy for Parks & Open Spaces in Lewisham was launched at the beginning of 2020 following consultation.

The strategy prioritises healthy streets and green spaces and in particular areas where people choose to walk, cycle and use public transport in preference to driving.

We are investing in green spaces across the borough including new green spaces such as Charlottenberg Park in New Cross, as well as the transformation of Beckenham Place Park and the introduction of the Greening Fund that allows local community groups to bid up to £40,000 for green infrastructure.

On 11 March 2020, Mayor and Cabinet agreed four priorities on which projects would have to address to qualify for the Neighbourhood Community Infrastructure Levy (NCIL) Community borough wide pot. Some of the grants allocated to community projects to improve Air Quality, including green infrastructure.

This AQAP is an opportunity to build on the success of our achievements and make Lewisham a cleaner, healthier, and greener borough.

The health impacts of pollution

Air pollution is associated with a number of adverse health impacts and it is recognised as a contributing factor in the onset of heart disease and cancer[32]. Additionally, air pollution particularly affects some of the most vulnerable in society: children and older people, and those with heart and lung conditions.

The following facts highlight the importance of dealing with air pollution and risk to human health and the environment as a whole:

- Despite significant improvements, levels of air pollution in London are still high for many Londoners and a recent study by Imperial College London, commissioned by the GLA, found that in 2019, toxic air contributed to the deaths of more than 4,000 Londoners[33].

[32] *https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4112067/*
[33] *https://www.imperial.ac.uk/news/213273/tackling-londons-pollution-will-increase-life/*

- A recent publication[34] by Public Health England revealed that there is also often a strong correlation with equalities issues because poor air quality is linked with higher social deprivation. Research carried out by Imperial College London showed that there were higher concentrations of particulate matter and nitrogen dioxide in the most deprived 20% neighbourhoods in England[35]. The negative health impacts of poor air quality fall disproportionally on the most vulnerable communities, with effects being exacerbated for the young, the elderly, the most deprived and those from black, Asian, and minority ethnic (BAME) groups. During the course of this plan, the information related to the role of air pollution in health and inequalities will be updated with the new data contained in PHE's edition of health matters[36].

- Recent research, based on the latest London Atmospheric Emissions Inventory, shows that every area in the capital exceeds World Health Organisation (WHO) limits for a damaging type of particle known as $PM_{2.5}$. Children living near roads with heavy-duty vehicle traffic have twice the risk of respiratory problems as those living near less congested streets[37].

- The UK Health Forum and Imperial College London, in collaboration with and funded by Public Health England (PHE), developed a modelling framework and estimated that a 1 µg m^{-3} reduction in fine particulate air pollution in England could prevent around 50,900 cases of coronary heart disease, 16,500 strokes, 9,300 cases of asthma and 4,200 lung cancers over an 18 year period[38].

- In 2010, the Committee on the Medical Effects of Air Pollutants (COMEAP)[39] speculated that it is reasonable to consider that air pollution may have made a contribution to the earlier deaths of up to 200,000 people in the UK (the number dying of cardiovascular causes) with an average loss of life of about two years. Using an approach of undertaking several individual exploratory calculations in 2018, the range of estimates of the mortality burden of the air pollution mixture (based on associations with $PM_{2.5}$ and NO_2) in 2013 in the UK is an effect

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[34] (PHE, 2020) Review of interventions to improve outdoor air quality and public health: Principal interventions for local authorities

[35] https://www.imperial.ac.uk/news/163408/ethnic-minorities-deprived-communities-hardest-pollution/

[36] https://www.gov.uk/government/publications/health-matters-air-pollution/health-matters-air-pollution#:~:text=matters-air-pollution-,Summary,leading%20to%20reduced%20life%20expectancy.

[37] Childhood Cancer and Traffic-Related Air Pollution Exposure in Pregnancy and Early Life. Heck et al. (2013) Envion Health Perspect 121:1385-1391

[38] https://www.gov.uk/government/publications/health-matters-air-pollution/health-matters-air-pollution#:~:text=matters-air-pollution-,Summary,leading%20to%20reduced%20life%20expectancy.

[39] *https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/304641/COMEAP_mortality_effects_of_long_term_exposure.pdf*

equivalent to 28,000 to 36,000 deaths at typical ages, associated with a loss of 328,000 – 416,000 life years[40].

- Air pollution is estimated to reduce life expectancy of every person in the UK by an average of 7-8 months with estimated equivalent health costs of up to £20 billion each year[41].

- According the public health England, epidemiological studies have shown that long-term exposure to air pollution (over several years) reduces life expectancy, mainly due to cardiovascular and respiratory causes and from lung cancer. The annual mortality burden of human-made air pollution in the UK is roughly equivalent to between 28,000 and 36,000 deaths[42].

- In 2010, the Environment Audit Committee considered that the cost of health impacts of air pollution was likely to exceed estimates of £8 to 20 billion[43]. Cost estimates using the Air pollution: a tool to estimate healthcare costs[44] will be used to estimate the cost for Lewisham during the cost of this plan.

- COMEAP's current estimate of the mortality burden of air pollution in the UK using a coefficient based on $PM_{2.5}$ (COMEAP, 2010) is an effect equivalent to nearly 29,000 deaths and an associated loss of 340,000 life years across the population in a single year. Given the correlation between pollutants, this estimate may include effects of other air pollutants, as well as PM[45].

- In January 2021, the Mayor joined a cross-part group of UK mayors in calling on Government to adopt World Health Organization (WHO) targets for fine particulate matter ($PM_{2.5}$) as legally binding air quality limits to be met no later

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40 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/734799/COMEAP_NO2_Report.pdf

41 Air Quality Information for Public Health Professionals – City of London, Greater London Authority, November 2012

42 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/938623/Review_of_interventions_to_improve_air_quality_March-2019-2018572.pdf

43 https://www.gov.uk/government/publications/health-matters-air-pollution/health-matters-air-pollution#:~:text=matters-air-pollution-,Summary,leading%20to%20reduced%20life%20expectancy.

44 https://www.gov.uk/government/publications/air-pollution-a-tool-to-estimate-healthcare-costs

45 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/734799/COMEAP_NO2_Report.pdf

than 2030. Some 40 million people in the 115 largest cities in the European Union (EU) are exposed to air exceeding WHO quality guideline values for at least one pollutant[46].

Ella Adoo-Kissi-Debrah legal case

Ella lived with her mother and two siblings approximately 25 metres from the South Circular. At the time of her death, on 15 February 2013, she attended a local primary school. A 2014 inquest initially found that the cause was acute respiratory failure and severe asthma.

Following the publication of new evidence on local pollution levels and the campaigning efforts of Ella's mother Rosamund, the High Court granted a new inquest. A second inquest ran in 2020 and the Coroner concluded that exposure to excessive air pollution contributed to Ella's death. Ella is thought to be the first person in the world to have her death directly linked to exposure to air pollution. Rosamund Adoo-Kissi-Debrah is a prominent campaigner on air quality and is well known in her local community and across the capital.

The Coroner's conclusion has set a legal precedent that should lead to an appropriate enforcement of air quality guidelines and highlighted the fact that air pollution is affecting the health of millions of people worldwide every day. In April 2021, the Coroner published a Prevention of Future Deaths Report[47] that set out three areas of concern, with matters addressed to different levels of government as well as health and care organisations.

Lewisham Council was asked to address one of the three matters of concern, raised in the Prevention of Future Deaths Report, focusing on public awareness of information about national and local pollution levels.

In response Lewisham Council has committed to key actions:

- **An expansion of monitoring capacity:** Automatic monitoring stations can now be supplemented by lower cost monitors through the GLA's Breathe London programme. The new monitors in Lewisham will feed into a London-wide network of sensors providing greater data and coverage and will help to contribute to improved public awareness of air pollution across the capital.
- We are also in the process of adding more diffusion tubes, with up to another 75 monitors in total (both diffusion tubes and the new $PM_{2.5}$ monitors) planned for installation by October 2027. It is important to note that these sensors will not replace the highly accurate reference-level automatic monitors which are critical for calibrating the lower cost sensors, measuring long term trends, ensuring accuracy, and for legal reporting against air quality objectives.
- **WHO-specific reporting:** As part of our commitment to provide additional and meaningful information around air quality levels, Lewisham Council will commit to identifying the WHO recommended levels alongside the current UK limits when publishing air quality data.

[46] *http://press.iarc.fr/pr213_E.pdf*
[47] *https://www.judiciary.uk/wp-content/uploads/2021/04/Ella-Kissi-Debrah-2021-0113-1.pdf*

- **Raising awareness:** Lewisham Council is formulating a plan which will include a multi-media approach: promoting air quality monitoring tools via social media and local advertising; ensuring information about air quality is positioned prominently on the websites of Lewisham Council and South East London Clinical Commissioning Group, and sharing information via social media and our residents' newsletter. This activity started on Clean Air Day on 17 June 2021.

The 2022-2027 AQAP has seven areas for action:

(1) **Monitoring and other core statutory duties:** Maintaining monitoring networks is absolutely critical for understanding where pollution is most acute, and what measures are effective to reduce pollution and is one of a number of statutory duties
(2) **Emissions from developments and buildings**: Emissions from buildings account for about 15% of the NO_X emissions across London so are important in affecting NO_2 concentrations.
(3) **Public health and awareness raising**: Increasing awareness can drive behavioural change to lower emissions as well as to reduce exposure to air pollution.
(4) **Delivery servicing and freight**: Vehicles delivering goods and services are usually light and heavy-duty diesel-fuelled vehicles with high primary NO_2 emissions.
(5) **Borough fleet actions**: Our fleet includes light and heavy-duty diesel-fuelled vehicles such as minibuses and refuse collection vehicles with high primary NO_2 emissions. Tackling our own fleet means we will be leading by example.
(6) **Localised solutions**: These seek to improve the environment of neighbourhoods through a combination of measures; and
(7) **Cleaner transport**: Road transport is the main source of air pollution in London. We need to incentivise a change to walking, cycling and ultra-low emission vehicles (such as electric cars) as far as possible.

Within the above areas the GLA has identified the following nine key priorities that all London Boroughs should be focussing on in addition to other locally derived priorities and/or others from the Matrix provided.

1. Public health and awareness raising: Reducing pollution in and around schools and extending school audits to other schools in polluted areas. We will work with Public Health in awareness raising, through school projects and establishing links with local businesses,
2. Enforcing the Non-Road Mobile Machinery (NRMM) Low Emission Zone,
3. Promoting and enforcing Smoke Control Zones,
4. Promoting and delivering energy efficiency retrofitting projects in workplaces and homes,
5. Supporting alerts services such Lewisham application and promoting the Mayor's air pollution forecasts,
6. Installing Ultra-Low Emission Vehicle (ULEV) infrastructure. LBL will work with partners, i.e., Blue Point and TfL to continue increasing the number of

electric vehicle charging points accessible to residents and businesses within the borough,

7. Improving walking and cycling infrastructure: we will build on the work already undertaken in relation to encouraging cycling and walking,
8. Regular Car Free days/temporary road closures in high footfall areas and
9. Reducing emissions from Council fleets.

To achieve our chosen actions we will work in partnership across the Council with neighbouring authorities, with partners such as the GLA, TfL and DEFRA, with community groups and volunteering organisation to effectively use the following local levers to tackle air quality issues within our control including:

- Implement joint working with public health professionals.
- Delivering transport projects that enable walking and cycling through the LIP.
- Continue to utilise the planning system to drive the air quality agenda via conditions and enforcement where appropriate.
- Encourage the use of lower emission vehicles by the Council, businesses, and residents.
- Measures at a wider scale and investigate options to make efficient use of resources by delivering joint actions, such as the London wide NRMM and Idling projects.

We will work hard to engage with stakeholders and communities who can make a difference to air quality in the borough.

We would like to thank all those who have worked with us in the past and we look forward to continuing partnerships (as well with new partners) as we deliver this new action plan over the coming five years.

In this AQAP we outline how we plan to effectively use local levers to tackle air quality issues within our control. However, we recognise that there are a large number of air quality policy areas that are outside of our influence (such as Euro standards, national vehicle taxation policy, taxis, and buses), and so we will continue to work with and lobby regional and central government on policies and issues beyond London Borough of Lewisham's influence.

RESPONSIBILITIES AND COMMITMENT

This AQAP was prepared by the *Environmental Protection Team* with the support and agreement of the following officers and departments:

Role/Team/Department	Officer Job Title
Public Realm	Director of Public Realm
Environmental Health	Head of Environmental Health
Environmental Protection	Environmental Protection Manager
Communication teams	Communications manager, Strategy and Communications
	Media Officer, Strategy
Crime Enforcement Regulation (CER)	Crime enforcement & regulation Service Manager, crime enforcement & regulation service
SGM Fleet and Passenger, Environment	Manager SGM Fleet and Passenger, Environment
Housing Private Sector (Environmental Health Residential)/Private Sector Housing (Grants)	Private Sector Housing Manager
IT and Analyst & Systems Team	Web Officer
Parking	Manager parking enforcement
	Principal Parking Engineer
	Electric Vehicle Infrastructure Project Manager , Regeneration and Place
	Development officer, Regeneration and Place
Parks & Regeneration	Ecological Regeneration and Open Space Policy Manager, Environment
Planning	Director of Planning
	Development Management - Service Group Manager, Planning
	Principal Policy Officer, Planning
	Major and Strategic Projects Manager – Planning
Procurement and Commercial Services	Procurement and Commercial Services Manager, Corporate Resources
	Senior Procurement and Contracts Officer, Corporate Resources
	Local Labour and Business Scheme Project Officer, Strategy
Public Health	Public Health Strategist
	Director of Public Health
Climate Resilience Team	Climate Resilience Manager

Sustainable Transport	Road Safety and Sustainable Transport Manager
	School Sustainable Transport Officer, Environment
Transport	Head of Strategic Transport
	Policy & Development Manager, Public Realm
	Senior Transport Planner
	Cycling & Walking Programme Manager, Public Realm
	Principal Engineer, Public Realm
	Parking Engineer, Public Realm
Community & Cultural Development	Third Sector Manager**,** Communities, Partnerships & Leisure Community Services

1 Summary of current air quality in London Borough of Lewisham

The UK Clean Air Strategy, released in 2019 (revision is due end 2022), provides the strategic framework for air quality management in the UK. It contains national air quality standards and objectives established by the Government to protect human health. The Strategy objectives take into account EU Directives that set limit values which member states are legally required to achieve by their target dates.

LBL is meeting the current objectives for Particulate Matter (PM_{10}) and is meeting all of the national objectives other than for Nitrogen Dioxide (NO_2). For $PM_{2.5}$ the legal objective is not as strict as the World Health Organisation (WHO) recommended guideline limit. In the London Environment Strategy, the Mayor has committed to meeting the WHO health-based guideline limits across London by 2030. LBL is exceeds WHO guideline $PM_{2.5}$ limits, and a key area of focus will be to meet this 2030 target.

On 25 January 2021, City Hall published the results of a study commissioned from Imperial College London's Environmental Research Group which found that the Mayor's air quality policies and wider improvements in air pollution will increase the average life expectancy of a child born in London in 2013 by six months.

Despite significant improvements, levels of air pollution in London are still too high for many Londoners and the study found that in 2019 toxic air contributed to the deaths of more than 4,000 Londoners. This shows that there is still vital work to do to improve London's air quality. This is why the Mayor is committed to expanding the Ultra-Low Emission Zone in October this year[48].

[48] *The report is available on the GLA website here: https://www.london.gov.uk/WHAT-WE-DO/environment/environment-publications/health-burden-air-pollution-london*

The new WHO Global Air Quality Guidelines (AQGs)[49] published on 22 September 2021 recommend new tighter air quality levels to protect the health of populations, by reducing levels of key air pollutants, some of which also contribute to climate change. Whilst not legally-binding, like all WHO guidelines, AQGs are an evidence-informed tool for policy-makers to guide legislation and policies, in order to reduce levels of air pollutants and decrease the burden of disease that results from exposure to air pollution worldwide.

Addressing $PM_{2.5}$ in Lewisham

LBL supports the Mayor's commitment to meet the World Health Organisation (WHO) guidelines for $PM_{2.5}$ which is more ambitious than the goal in the new national Clean Air Strategy. Currently $PM_{2.5}$ limit levels in UK are working towards the WHO Global Air Quality Guidelines which is 10 µg m^{-3}. In 2021, the WHO has introduced a target 5 µg m^{-3} annual mean concentration. Conscious that this will be a difficult task for many countries and regions struggling with high air pollution levels, WHO has proposed interim targets (IT) to facilitate stepwise improvement in air quality and thus gradual, but meaningful, health benefits for the population. The previous WHO concentration of 10 µg m^{-3} is now an interim target to be met by 2030 as suggested by the Mayor.

Unlike other pollutants, such as nitrogen dioxide, a large percentage of $PM_{2.5}$ in London comes from regional, and often trans-boundary (non-UK) sources. Therefore, the powers to tackle these emissions involves London, the UK and other European governments which can make it more difficult to address with direct measures. The Mayor of London stated that approximately half of $PM_{2.5}$ in London is from sources outside the city[50]. The main sources of $PM_{2.5}$ emissions in London are from tyre and brake wear, construction and wood burning.

LBL supports the Mayor's objective to work with European institutions, other European cities, and city networks to ensure that trans-boundary pollution affecting London is minimised and ensuring strong source control measures and regulations are adopted at EU level. The following interventions have been welcomed within Lewisham:

- Real-world driving emissions testing, type-approval process arrangements, tyre and brake wear, and new emission standards (for example Euro 7).
- The introduction of the central London ULEZ and cleaning up the bus and taxi fleets.
- Encourage and promote the reduction of the number of trips made by road and encourage walking, cycling and public transport where possible, as laid out in the Mayor's Transport Strategy.

[49] *https://www.who.int/news/item/22-09-2021-new-who-global-air-quality-guidelines-aim-to-save-millions-of-lives-from-air-pollution*
[50] *https://www.london.gov.uk/press-releases/mayoral/every-londoner-is-exposed-to-dangerous-toxic-air#:~:text=Around%20half%20of%20PM2.,wear%2C%20construction%20and%20wood%20burning.*

- Reduce emissions from biomass burning (including domestic wood burning); construction, with emissions from NRMM; and from cooking (including commercial cooking); and
- Government policies will greater ability to reduce $PM_{2.5}$ emissions from road transport as detailed the London Environment Strategy and Mayor's Transport Strategy[51].

The Government's goal is to reduce the number of people exposed to $PM_{2.5}$ above the WHO target by 50% by 2025. If achieved this would still leave many Londoners and Lewisham`s residents exposed to the health effects of high levels of pollution.

LBL will focus on reducing and monitoring $PM_{2.5}$ over the course of this Air Quality Action Plan.
Our intention is still to work with other authorities towards meeting the 10 µg m^{-3} annual mean concentration by 2030 and to adhere to any legally binding targets to reduce all UK concentrations of $PM_{2.5}$ to WHO recommended levels by 2030, should these be implemented. The new guideline of 5 µg m^{-3} will be re-considered when the new UK Air quality strategy has been published.

LBL, along with other London boroughs, will work to set out how this target can be reached and provide details setting out how the most vulnerable people will be protected.

The combination of actions and policies currently in force, or coming into force, laid out in the AQAP will bring about a reduction of $PM_{2.5}$ across Lewisham.

Some of the actions due for consideration include for example:

- Actions within the Clean Air Act 1993. This enables local authorities to tackle smoke emissions from chimneys of buildings, fixed boilers and industrial plants. Further actions will be considered to target domestic combustion, which is the major source of $PM_{2.5}$. We will examine introducing greater powers to declare and enforce smoke control areas. Tighter minimum emission standards for burning stoves and a ban on domestic burning in areas with high $PM_{2.5}$ levels will also be considered.
- As part of future development planning, we will look to locate sensitive receptors like hospitals, schools and care homes away from main roads where pollution is high.
- Increasing $PM_{2.5}$ monitoring around schools and other vulnerable receptors like hospital and care homes. If funding opportunities arise for new air quality monitors, priority will be given to $PM_{2.5}$.
- LBL commissioned a new reference monitor in Deptford that will be measuring $PM_{2.5}$, increasing our $PM_{2.5}$ reference monitoring locations. LBL has been monitoring $PM_{2.5}$ on New Cross Road since 2015.

[51] *Mayor of London, (2018); Mayor's Transport Strategy.*

A combination of complementary initiatives is key to dealing with the short and longer-term $PM_{2.5}$ on-air quality in Lewisham. However, initiatives in with evidence of positive impacts on air quality in the short term, such as increasing parking charging fees, idling enforcement, green infrastructure and traffic management should be given priority. LBL will consider implementing a parking policy that will allow higher parking fees to be charged for vehicles that cause more pollution.

DEFRA announced during a meeting in January 2021 their intention to publish a Clean Air Strategy with updated air quality objective that align with the new WHO AQGs published. A local authority guideline document to address $PM_{2.5}$ will be published in due course. LBL will adhere to these new
Guidance documents when published.

Air Quality Modelling Data

London wide

The GLA published new data [52] on 16 December 2021 showing dramatic improvements in London's air quality across the capital since 2016, confirming that measures implemented by the Mayor and different stakeholders have helped reduce exposure to air pollution across London.

The data shows:

- In 2019, 84 % of major roads in London met the legal limit for NO_2, compared to 46% in 2016 and just 37% in 2013.
- There has been a significant reduction – approximately 22% – in NO_2 across the whole of Greater London from 2016 to 2019 with notable improvement in areas meeting the legal limit for NO_2 in 2019.
- In particular, huge progress has been made on London's 'red routes' with 70 per cent of the Transport for London Road Network meeting the legal limit for NO_2 in 2019, increased from 29 % in 2016 and just 21 % in 2013.
- The $PM_{2.5}$ concentration maps show that there was a 19% reduction in $PM_{2.5}$ across the whole of the city since 2016 with many parts of outer London meeting the WHO interim guideline of 10µgm^{-3} for the first time.
- Nearly 1.2 million Londoners now live in areas meeting the WHO interim guideline of 10 µgm-^{3} in 2019. It had been previously estimated that no Londoners were living in areas meeting this target in 2016.
- The predicted concentrations of NO_2 are all below the AQO for NO2 of 40 µg m^{-3}, however, the predicted concentration of $PM_{2.5}$ are all above the AQO objective of 10 µg m^{-3} in all our educational institutions.
- The LAEI 2019 will also include borough level data to be published in early 2022 and forecast emissions and concentration maps for 2025 and 2030 to be published in spring 2022.
- The recent 2019 GLA modelling air quality data published in 2022 now shows all concentration of NO_2 below the air quality objective of 40µg m-^{3} around all

[52] *https://data.london.gov.uk/dataset/london-atmospheric-emissions-inventory--laei--2019*

Lewisham Schools. However concentrations of $PM_{2.5}$ are above the WHO guideline of 10µg m^{-3}

The fact that such significant progress has been made reducing $PM_{2.5}$ concentrations adds to the growing evidence and cross-party consensus that, as a minimum, the interim WHO guideline should be included in the secondary legislation of the Environment Act as a new legally binding target for $PM_{2.5}$.

Lewisham Modelling Data

Air Quality Monitoring Date (AQMA) is generally reported at borough level, and there is often a lack of monitoring for air pollution 'hotspots' or Air Quality Focus Areas (AQFA's). The most effective way to use monitoring information is to compare data recorded over a number of years at the same site. To compare borough-wide pollution concentrations it is best to refer to the London-wide concentration modelling in the London Atmospheric Emissions Inventory (LAEI).[53]

Using the base line of 2013, the LAEI carried out modelling work to produce the predicted 2020, 2025, and 2030 annual mean NO_x, NO_2, PM_{10} and $PM_{2.5}$ concentrations on a 20m x 20m basis (or Grid) for the whole of London.

Emissions for 2010 and 2013 were recalculated, using the latest data sources (including emission factors and activity data) and methodology, detailed in the LAEI website, to produce the LAEI 2016 maps[54].

The LAEI uses air pollution emission estimates from a wide range of sources, including transport, industrial, domestic, and commercial combustion, and uses the most up-to-date activity data, emission factors and projection factors.

The LAEI 2016 is the latest version presented in this report and replaces previous versions of the inventory. Emissions estimates of key pollutants (NOx, PM_{10}, $PM_{2.5}$ and CO_2) by source type are included for the base year 2016.

It is anticipated that the current version of the LAEI figures presented in the following section of this report will be updated with new Lewisham specific figures due at the end of 2022.

Figure 2 shows the 2016 LAEI baseline annual mean NO_2 concentrations in Lewisham. The changes in colours show how the pollution gradient changes, with distance, away from the heavier traffic.

[53] *https://data.london.gov.uk/air-quality/*
[54] *https://data.london.gov.uk/dataset/london-atmospheric-emissions-inventory--laei--2016*

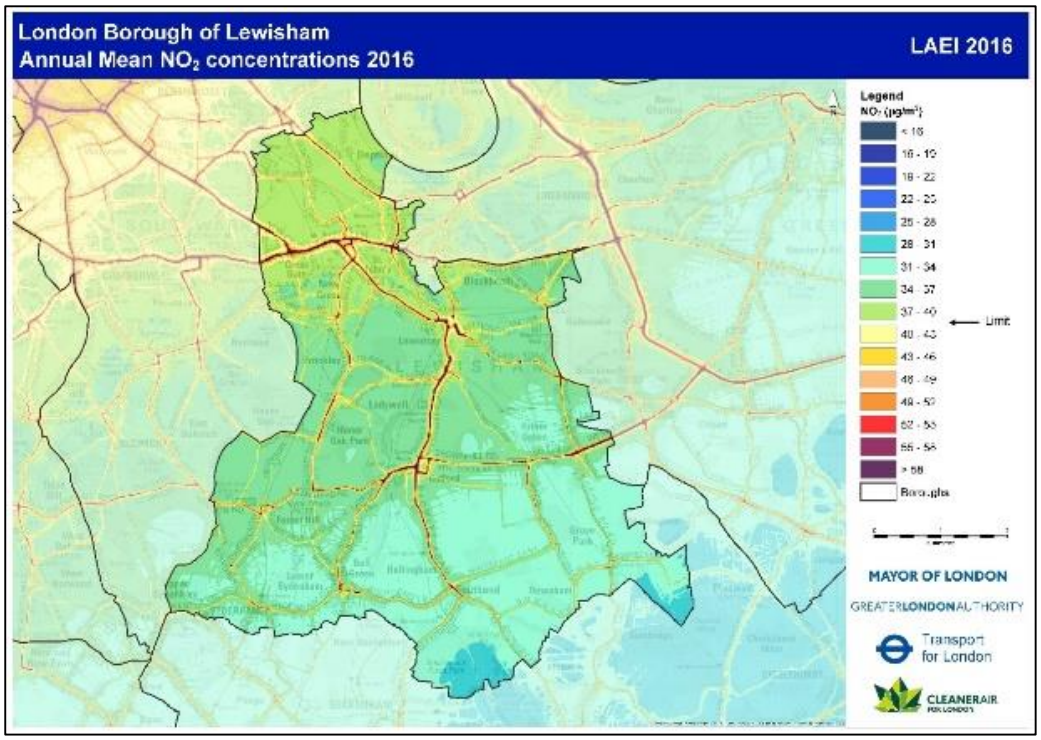

Figure 2 Modelled map of annual mean NO_2 concentrations (from the LAEI 2016)

Note: At the time of writing this plan, no updated version of this figure was available on the LAEI website for use. The new data is due before the end of 2022 and this plan will be updated accordingly.

The map shows that much of the borough has pollution levels below the target limit. The highest concentrations of NO_2 which breach the legal limits (as shown in black to red colouring) are found on the busiest main roads in the borough. However pollution levels quickly reduce with distance from the pollution source.

Figures 3 and 4 shows (3) the 2016 LAEI baseline annual mean PM_{10} concentrations and (4) the Number of days with a daily PM_{10} mean greater than 50 μgm^{-3} in Lewisham. Similarly, the contours (changes in colours) show how the pollution gradient changes, with distance, away from the heavier traffic. The concentrations PM_{10} are generally low and below the recommended limit. The concentrations daily PM_{10} are generally low and below the recommended limit and slightly higher around major roads where heavy traffic is expected.

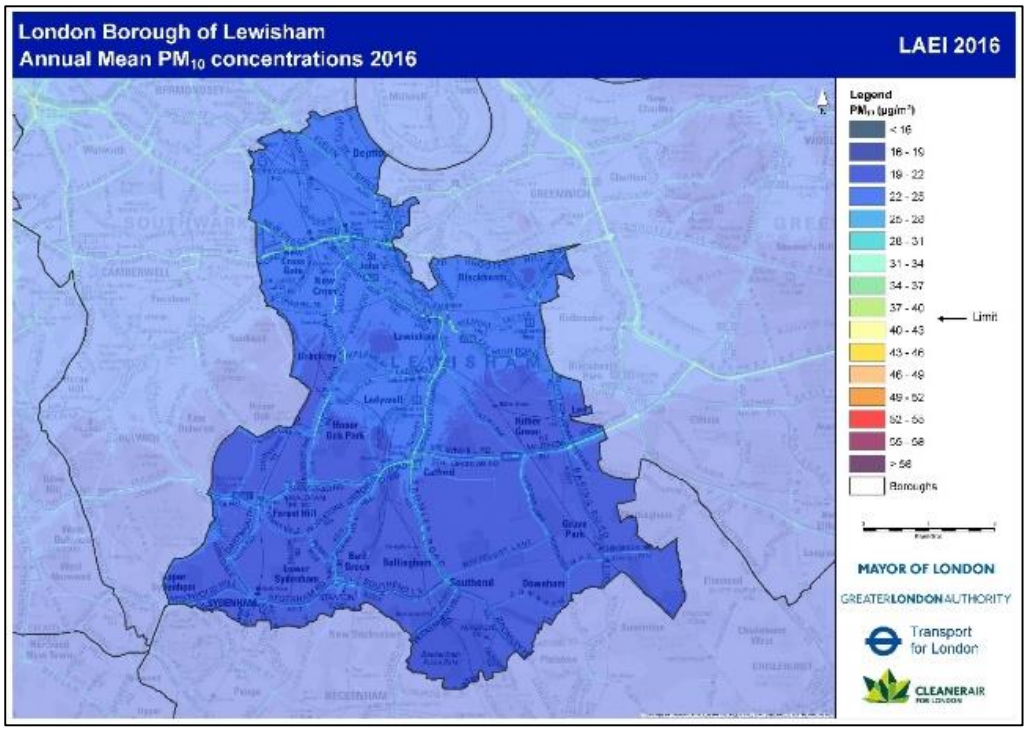

Figure 3 LAEI baseline annual mean PM_{10} concentrations (from the LAEI 2016)

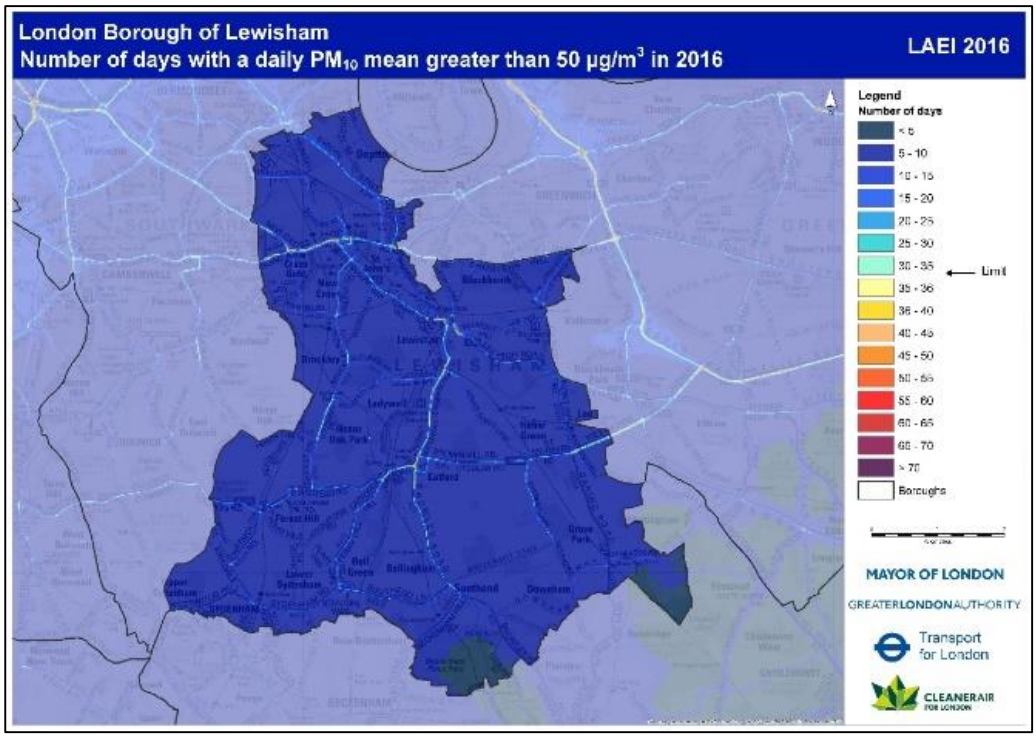

Figure 4 Number of days with a daily PM_{10} mean greater than 50 μgm^{-3} (from the LAEI 2016).

Note: At the time of writing this plan, no updated version of this figure was available on the LAEI website for use. The new data is due before the end of 2022 and the plan will be updated accordingly.

Figure 5 shows the 2016 LAEI baseline annual mean $PM_{2.5}$ concentrations in Lewisham.

There is no evidence that there is any safe level for $PM_{2.5}$. They are small enough that they penetrate Cardio-vascular & respiratory systems and get stuck there, then cause negative impacts to human health[55]. The map shows that higher concentrations of $PM_{2.5}$ are recorded on major roads where heavy traffic occur.

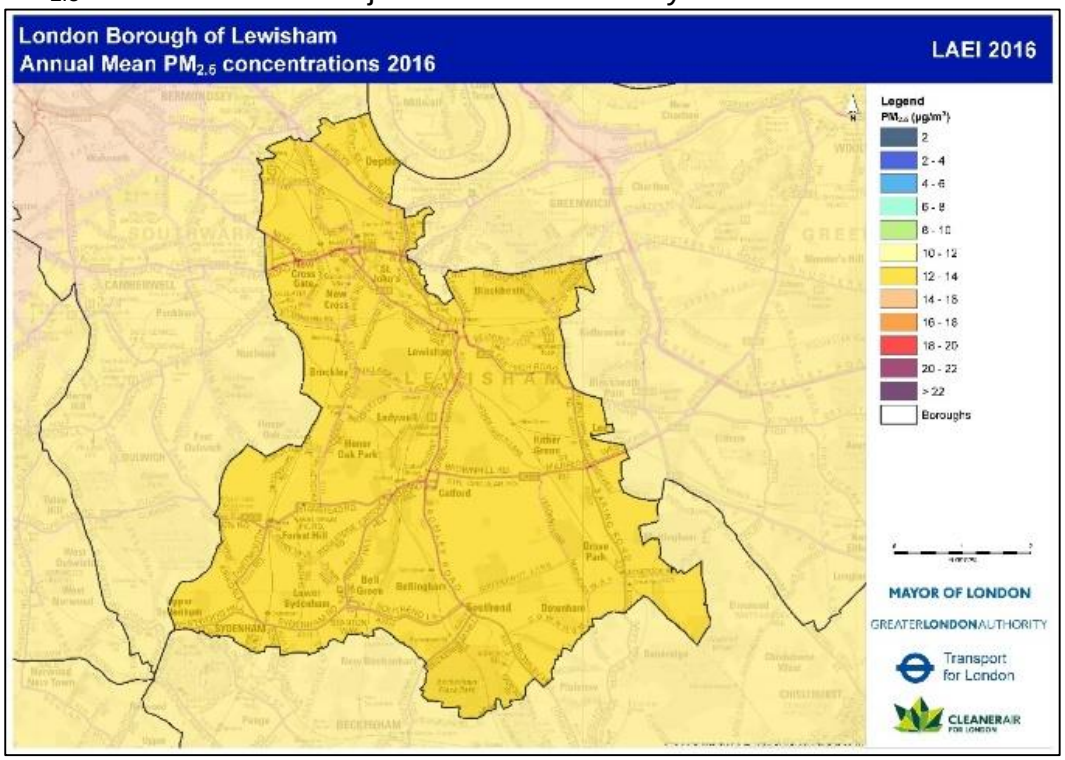

Figure 5 LAEI baseline annual mean $PM_{2.5}$ concentrations (from the LAEI 2016)

Note: At the time of writing this plan, no updated version of this figure was available on the LAEI website for use. The new data is due before the end of 2022 and the plan will be updated accordingly.

[55] *https://www.lung.org/clean-air/outdoors/what-makes-air-unhealthy/particle-pollution*

Lewisham`s Air quality Monitoring Data and Trends

While utilising detailed air quality modelling data such as the LAEI, LBL also has statutory duties to monitor a variety of pollutants across the borough. The results of historical and current monitoring show that the concentrations of pollutants have decreased over the years and the full reports can be found on our webpage[56].

Current NO_2 diffusions tube and automatic station locations and results of the 2019 air quality monitoring round are presented in our current Annual Status report available on our webpage[57].

1.1 AQMAs and Focus areas

There are two major Air Quality Management Areas (AQMAs) declared within LBL.

- Lewisham AQMA declared in 2001 for exceedances in annual mean NO_2 and 24-hour mean PM_{10} concentrations and;

- Crofton Park and Honor Oak Park AQMA declared in 2013 for exceedances in annual mean NO_2 concentrations.

A map of the AQMAs can be found in Figure 6. Lewisham`s two AQMAs cover most of the borough apart from the south eastern part.

The AQMA has been declared for Nitrogen Dioxide because we are failing to meet the EU annual average limit for this pollutant at some of our monitoring stations and modelling indicates it is being breached at a number of other locations. It also examines levels of Particulate Matter (PM) because although we are meeting EU Limits we are exceeding World Health Organisation air quality guideline for this pollutant. We have a formal responsibility to work towards reductions of $PM_{2.5,}$ which is a fraction of PM_{10} and predicted concentrations of $PM_{2.5}$ are generally between 12-14 µg m^{-3} across the borough and higher and up to 20 µg m^{-3} along major routes with heavier traffic. The WHO introduced a target 10 µg m^{-3} annual mean concentration, which was reduced to 5 µg m^{-3} in 2021 following new scientific evidence of the actual human health risk.

Figures 6 and 7 Air Quality Management Areas in (6) the areas declared in 2001 and 2013 (7) the geographic location of the areas within the areas declared in 2001 (not to scale).

[56] *https://lewisham.gov.uk/myservices/environment/air-pollution/read-our-air-quality-action-plan-and-other-reports*
[57] *https://lewisham.gov.uk/myservices/environment/air-pollution/read-our-air-quality-action-plan-and-other-reports*

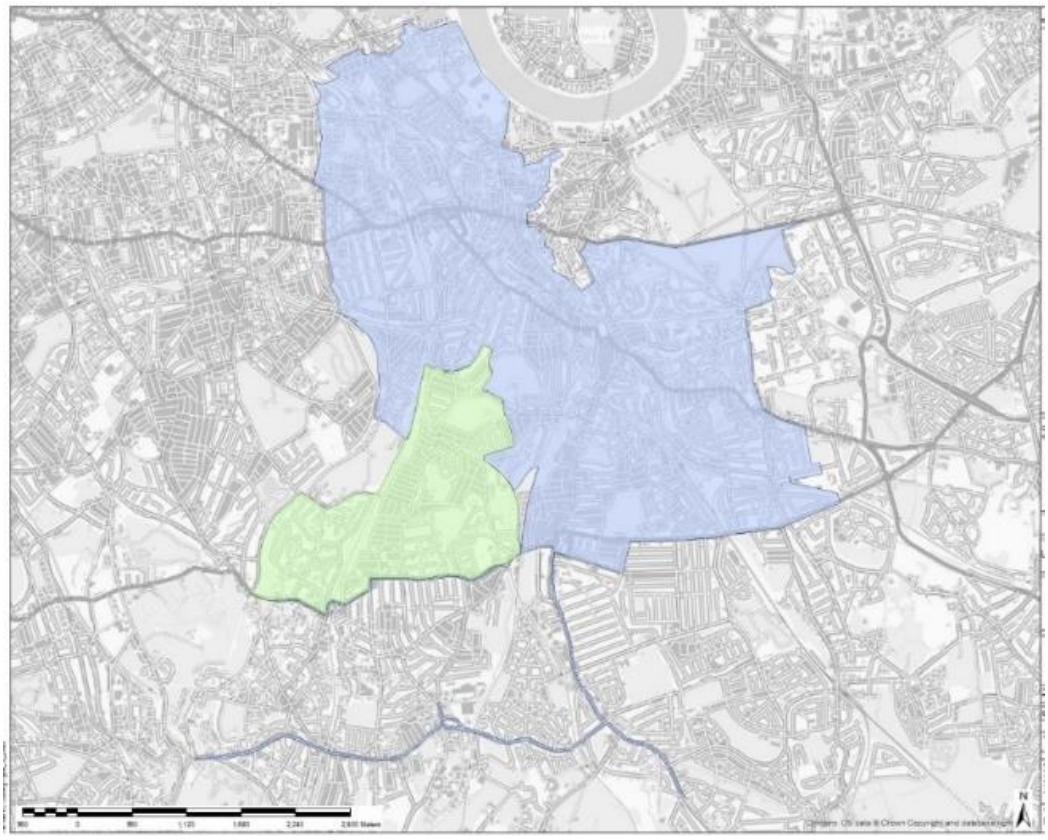

Figure 6 AQMA declared in 2001 and 2013

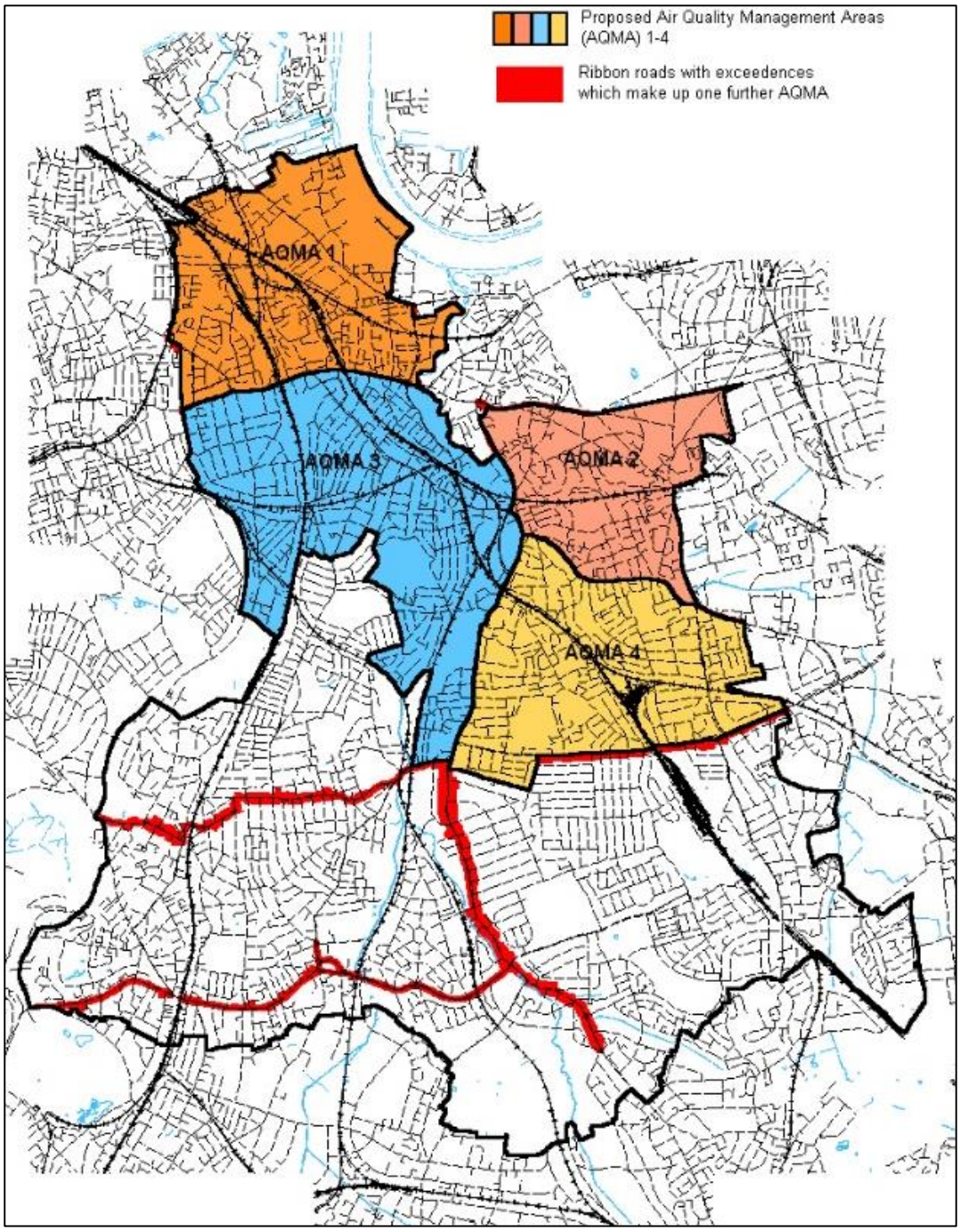

Figure 7. The geographic location of the AQMA within the areas declared in 2001 (not to scale)

An Air Quality Focus Area is a location that has been identified by the GLA as having high levels of pollution and human health exposure. There are nine focus areas in the borough. Lewisham's annual summary report, available on our website, shows the actions taken in the focus areas. Further actions are proposed as part of this AQAP.

The current Air Quality Focus Areas are included on the maps (Figure 8) of pollutant concentrations across Lewisham.

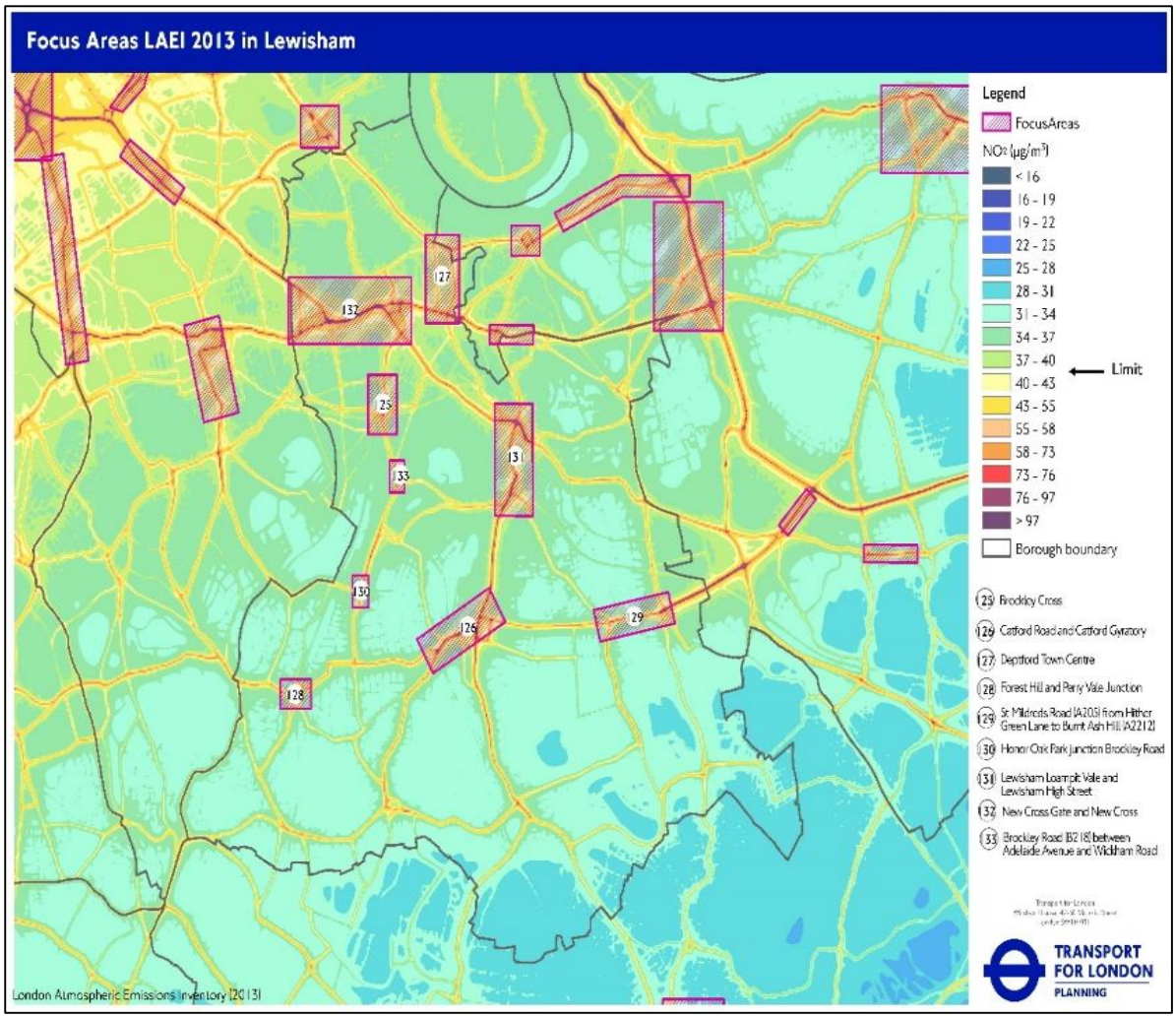

Figure 8 Air Quality Focus Areas in London Borough of Lewisham (from the LAEI 2013)

Note: The Air Quality Focus Areas (AQFAs) presented in the published 2016 figure are similar to the 2013 map. However no description of the AQFAs is presented on the revised 2016 figure. The new data is due before the end of 2022 and the plan will be updated accordingly.

A briefly summary of work undertaking in these areas and any actions planned are included in the Action Table 4.1. Local Implementation Plan Projects in Air Quality Focus Areas in 2016-2021, some of which are still ongoing are presented in the following Table 1.1.

Table 1.1 Past and Ongoing LIP projects in Air Quality Focus Areas

No.	GLA ref.	Focus Area	Local Implementation Plan Projects[58]					
1	125	Deptford Church Street	Quietway 1 (Implemented)	Cycle Superhighway 4 (in design) *This is now being delivered on Evelyn Street. Due to be fully complete in Autumn 2022.* *We are also undertaking a feasibility study into segregated cycle lanes on DCS although this is not LIP funded.*	Quietway 2 (in design)	S106 New Bus Services	New Electric Vehicle CP Sites *With the OZEV funding secured for 22/23 we're seeking to deliver a further 40 on-street EVCPs*.	New 20mph limits[59]

[58] The future implementation of the ongoing/planned projects will depend on the availability of the appropriate level of funding. Current funding is in place 24 June 2022 and then there is no certainty of funding beyond this point.

[59] There is a borough-wide 20mph limit in place. Any new 20mph limits will be on TfL roads

No.	GLA ref.	Focus Area	Local Implementation Plan Projects[58]					
2	126	New Cross	Bakerloo Line Extension (Consultation)	A2 Corridor Study – TfL	Old Kent Road OA work with LB Southwark & GLA	S106 New Bus Services	New Electric Vehicle CP Sites	New 20mph limits Deptford Parks Liveable Neighbourhood (DPLN) Project *The implementation is subject to funding.* Woodpecker Walk improvements that come into New Cross Ward.
3	127	Brockley Cross	Rail Strategy including Overground proposals	B218 Corridor Study *The delivery of future phases will be subject to funding.*	New EVCP Sites	New 20mph limits		
4	128	Honor Oak Park	New speed camera at Stondon Park Junction (implemented)	B218 Corridor Study	New EVCP Sites	New 20mph limits		

No.	GLA ref.	Focus Area	Local Implementation Plan Projects[58]					
5	129	Loampit Vale & L. High St	Bakerloo Line Extension (Consultation)		New EVCP Sites	New 20mph limits		
6	130	Catford Road	Major regeneration programme, including A205 alignment (feasibility) *We're continuing to work with TfL and the next milestone is to submit the strategic outline business case to DfT*	Quietway 2 (in design)	New EVCP Sites *With the OZEV funding secured for 22/23 we're seeking to deliver a further 40 on-street EVCPs.*	New 20mph limits		
7	131	A205 Brownhill Road	A205 Brownhill Road Corridor improvements (in design)	New EVCP Sites	New 20mph limits	TFL road *Further improvements are being proposed by TfL at the Brownhill Rd /*		

No.	GLA ref.	Focus Area	Local Implementation Plan Projects[58]					
						Torridon Rd junction.		
8	132	Forest Hill	A205 Devonshire Rd minor junction improvement (implemented)	Dartmouth Road streetscape improvements (including 20mph measures)	New EVCP Sites	New 20mph limits	Air Quality Assessment commissioned with recommendations in 2017	
9	133	Deptford Parks	Copenhagen crossings	Prince Street and Scawen Rd modal filters *Initially introduced as temporary measure, these have now been made permanent.*		Streets in North Deptford will see reduced traffic owing to new restrictions.	Improvements to Woodpecker Walk and Rolt Street are due to be implemented – *These have now been delivered. As per update in Table J*	Liveability Neighbourhoods- Streets in North Deptford will see reduced traffic owing to new restrictions. The funding picture and the scope of work for this action remain unclear *There is currently no Liveable Neighbourhoods funding for the Deptford Park Liveable Neighbourhood Scheme.*

Borough Wide Interventions to deal with Air Pollution

It is important that LBL keep working to reduce levels of air pollution not only in Air Quality Management Areas (AQMAs) but across the wider local authority area. As outlined in our 2019 review of interventions to improve outdoor air quality and health[60], Pubic Health England (PHE) recommend that evaluation is embedded in the design of interventions from their outset and to systematically gather evidence of their impact and effectiveness. Certain principles will guide our approach to reducing air pollution across the borough, including: different air pollutants will be considered and tackled together, we will, work with all stakeholders and local authorities using a coherent approach as prescribed in this GLA template, involve everyone in our actions, attempt to reduce air pollution at source than to mitigate the consequences, which can lead to economic growth and provide particular support to all groups that are disproportionally affected by air pollution. We will use the interventions available to local authorities as prescribed by PHE to reduce pollution across the borough together with the GLA prescribed methodologies to address air pollution across the borough.

A summary of public health air quality indicators for London authorities is available online for consultation[61]. For Lewisham, the values and trends of indicators are currently 6.4, 11.3 and 55.5% respectively for fraction of mortality attributed to particulate air pollution, air pollution: fine particulate matter both for the year 2019 and proportion of population living within AQMAs (%) in 2017. These indicators will be monitored throughout the course of this plan.

Air Pollution and Inequalities in Lewisham

The GLA report[62] analyses the relationship between exposure to air pollution, deprivation and ethnicity in London in 2019. The report builds on previous analysis undertaken on behalf of the Greater London Authority: Air Pollution Exposure in

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https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/938623/Review_of_interventions_to_improve_air_quality_March-2019-2018572.pdf

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https://fingertips.phe.org.uk/search/air%20quality#page/0/gid/1/pat/6/ati/102/are/E09000023/iid/92924/age/-1/sex/-1/cat/-1/ctp/-1/cid/4/tbm/1/page-options/car-do-0_ovw-do-0

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https://www.london.gov.uk/sites/default/files/air_pollution_and_inequalities_in_london_2019_update_0.pdf

London: Impact of the Environment Strategy (2019), Updated Analysis of Air Pollution Exposure in London (2017) and Analysing Air Pollution Exposure in London (2013). These reports all focused on air quality at that time in London, seeking to identify whether air pollution had a role in health and social inequality and the degree to which it could be quantified (using data available at that time).

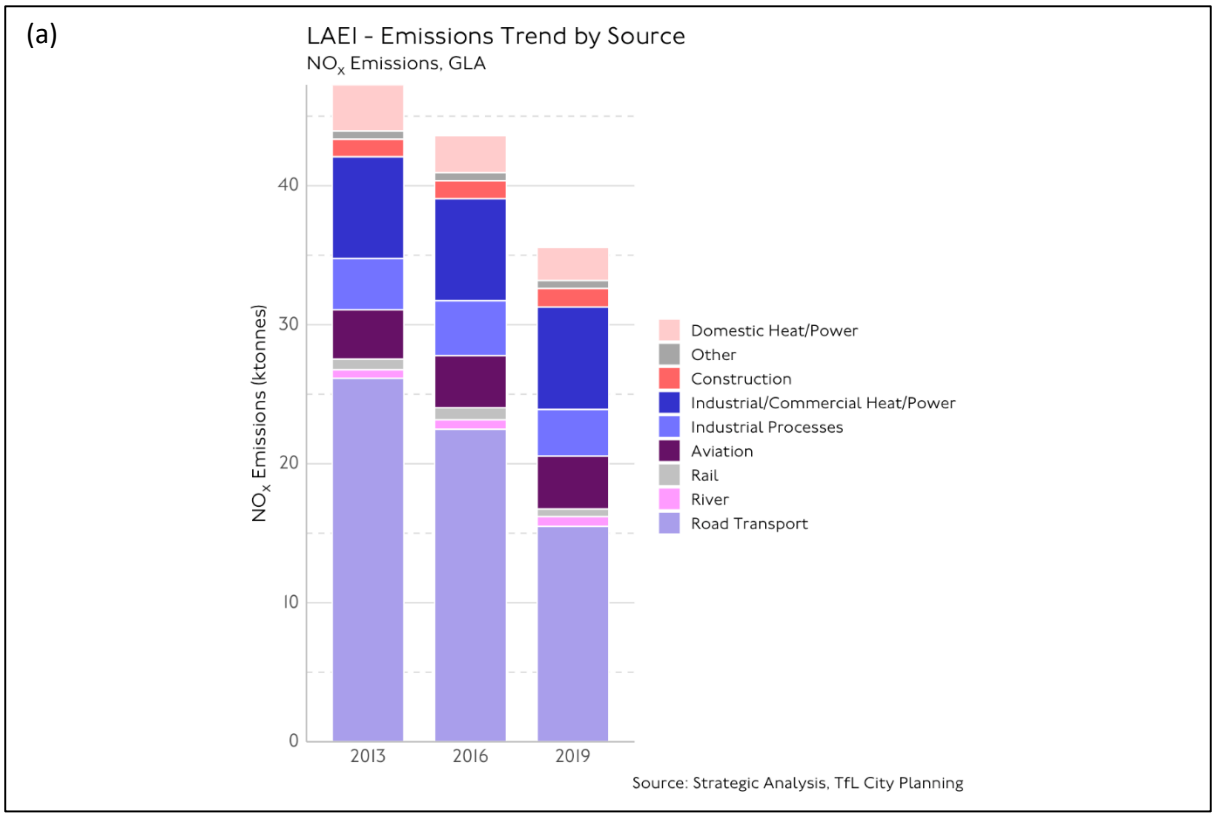
The later report shows communities which have higher levels of deprivation, or a higher proportion of people from a non-white ethnic background, are still more likely to be exposed to higher levels of air pollution. However, thanks to the Mayor's policies the gap between the most and least deprived areas for exposure to NO_2 has narrowed by up to 50%.

Further research and works in Lewisham particular will be considered during the course of this plan to improve the understanding in order to address the issue of air pollution and inequalities.

1.2 Sources of Pollution in LBL

Pollution in Lewisham comes from a variety of sources. This includes pollution from sources outside of the borough, and, in the case of particulate matter, a significant proportion of this comes from outside of London and the UK.

Of the pollution that originates in the borough and London in general, the main sources of NO_2 are road transport and industrial sources (Figure 9). The main sources of particulate matter are road transport (e.g., diesel vehicles), re-suspension, and NRMM (Figures 9, 10). In relation to transport emissions (Figures 10 and 12) diesel vehicles predominate. Figure 15 shows that road transport is the major source of CO_2.



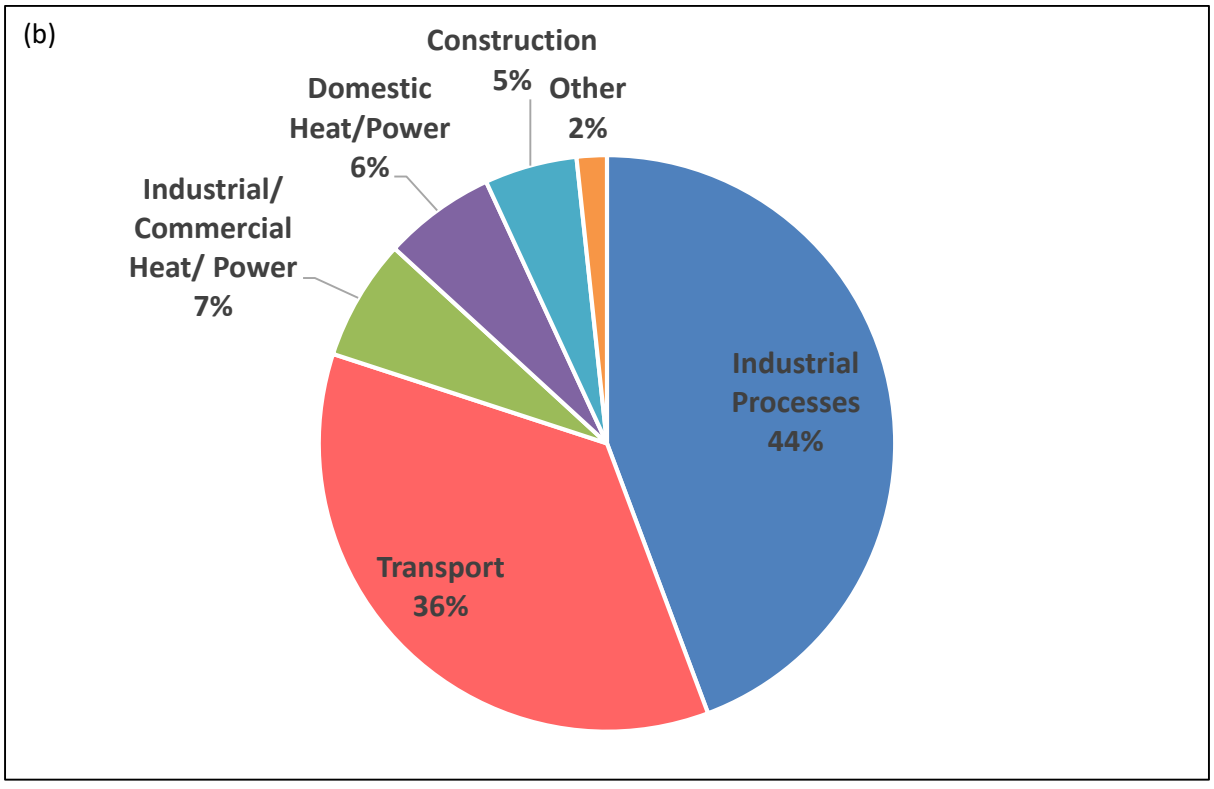


Figure 9 (a) 2019 NO_x London Emissions by source (from the LAEI 2021) and (b) LBL NOx Emissions by source (from the LAEI 2016)

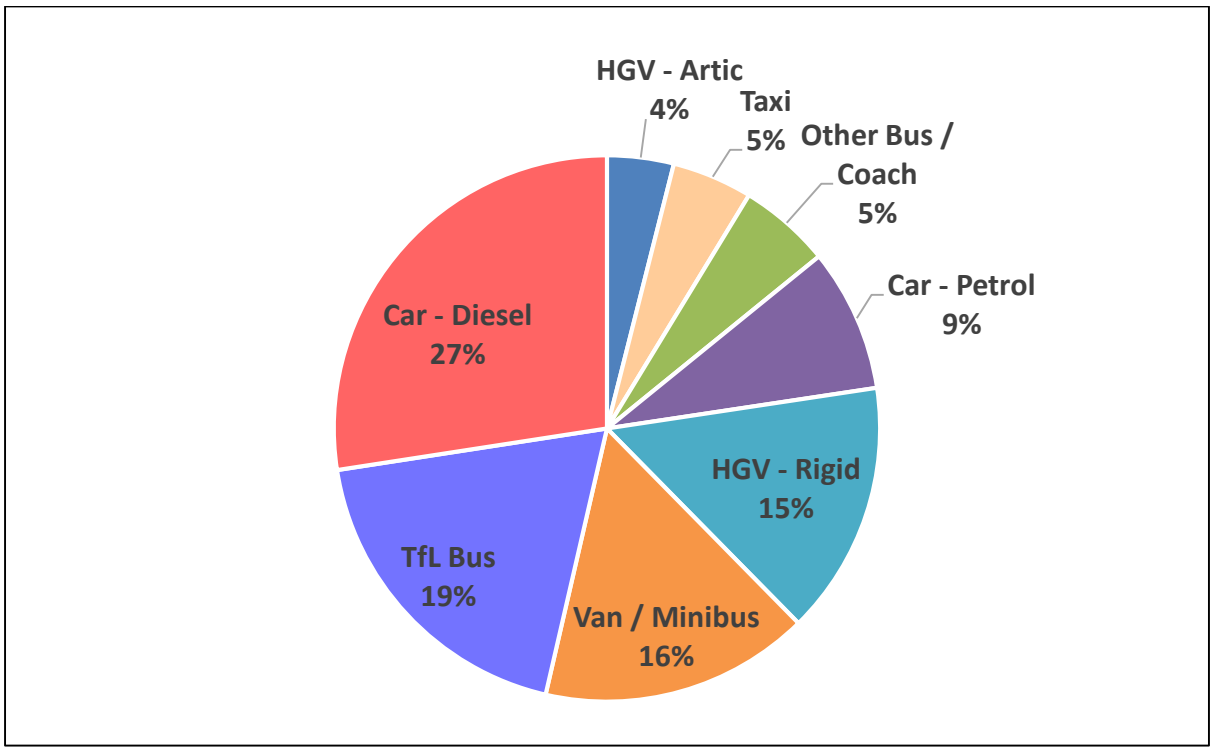
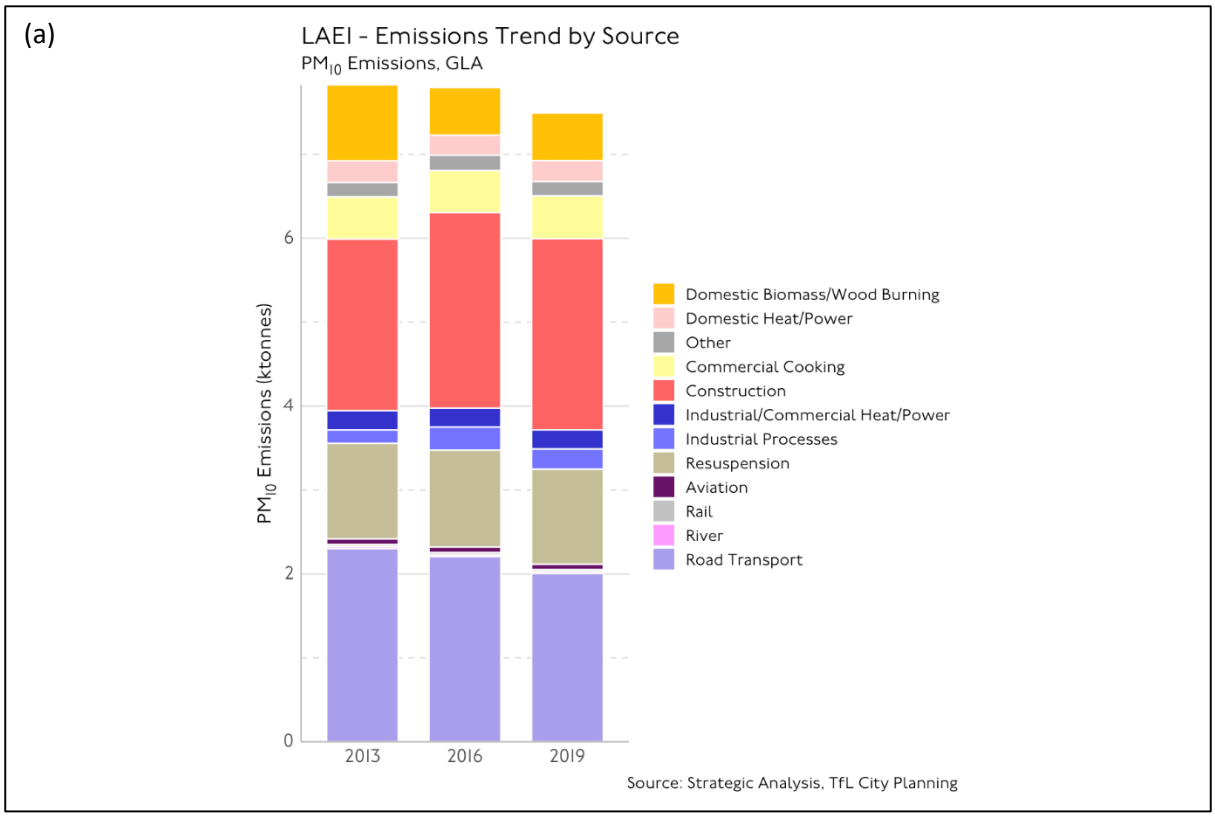


Figure 10 NOx Emissions by vehicle type breakdown (from the LAEI 2016)

This excludes industrial sources, as the Nitrogen Oxide emissions are dispersed at high level and will not have any significant contribution to resident's exposure.



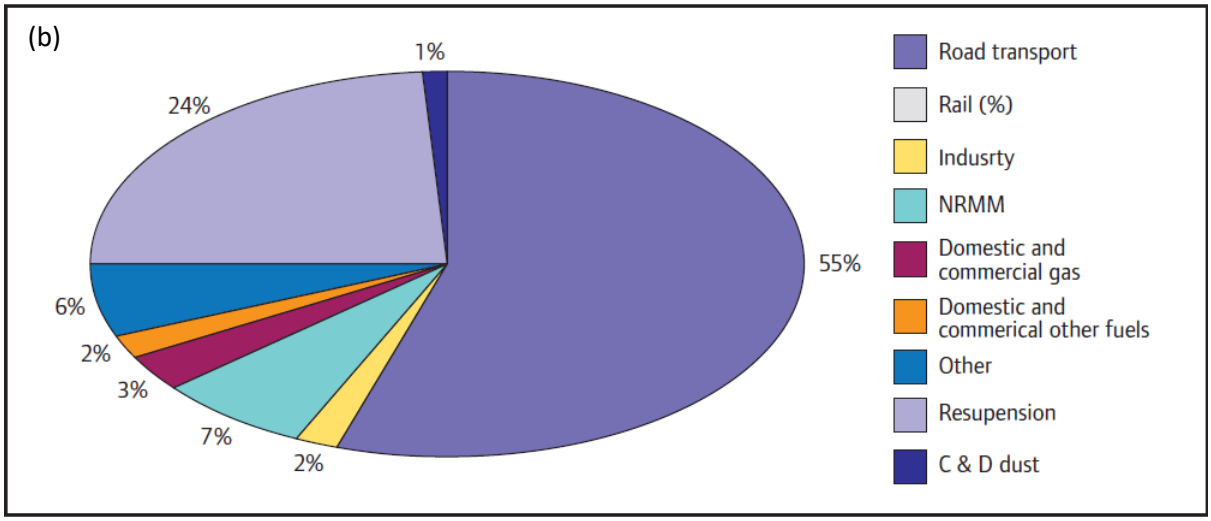


Figure 11 (a) 2019 PM_{10} London Emissions by source (from the LAEI 2021) and (b) PM_{10} LBL Emissions by source (from the LAEI 2013)

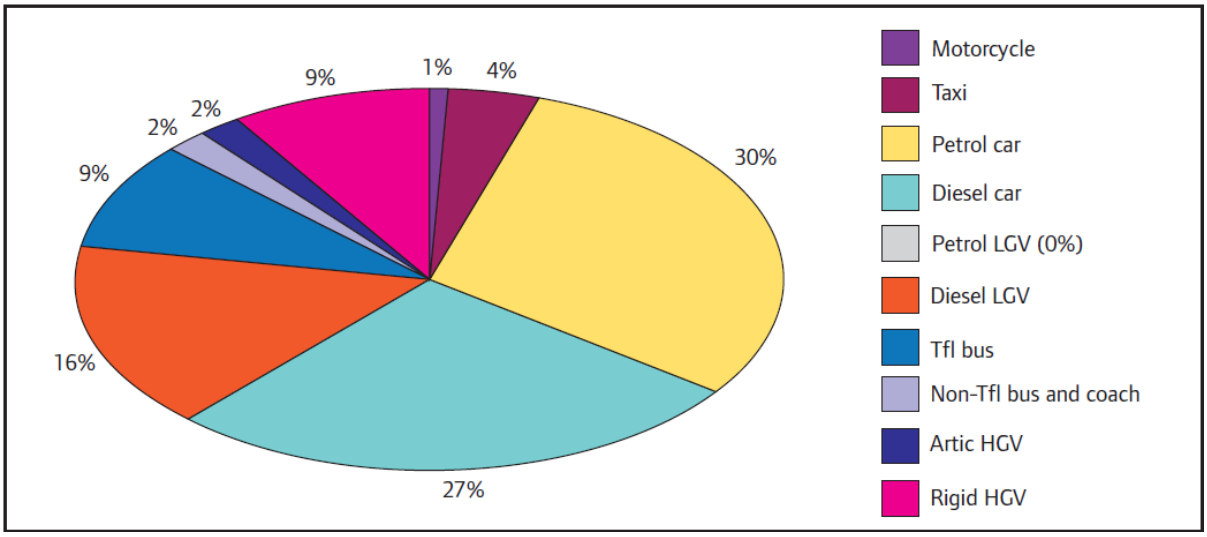


Figure 12 PM_{10} Emissions by vehicle type with total emissions from brake, tyres and exhaust (from the LAEI 2013)

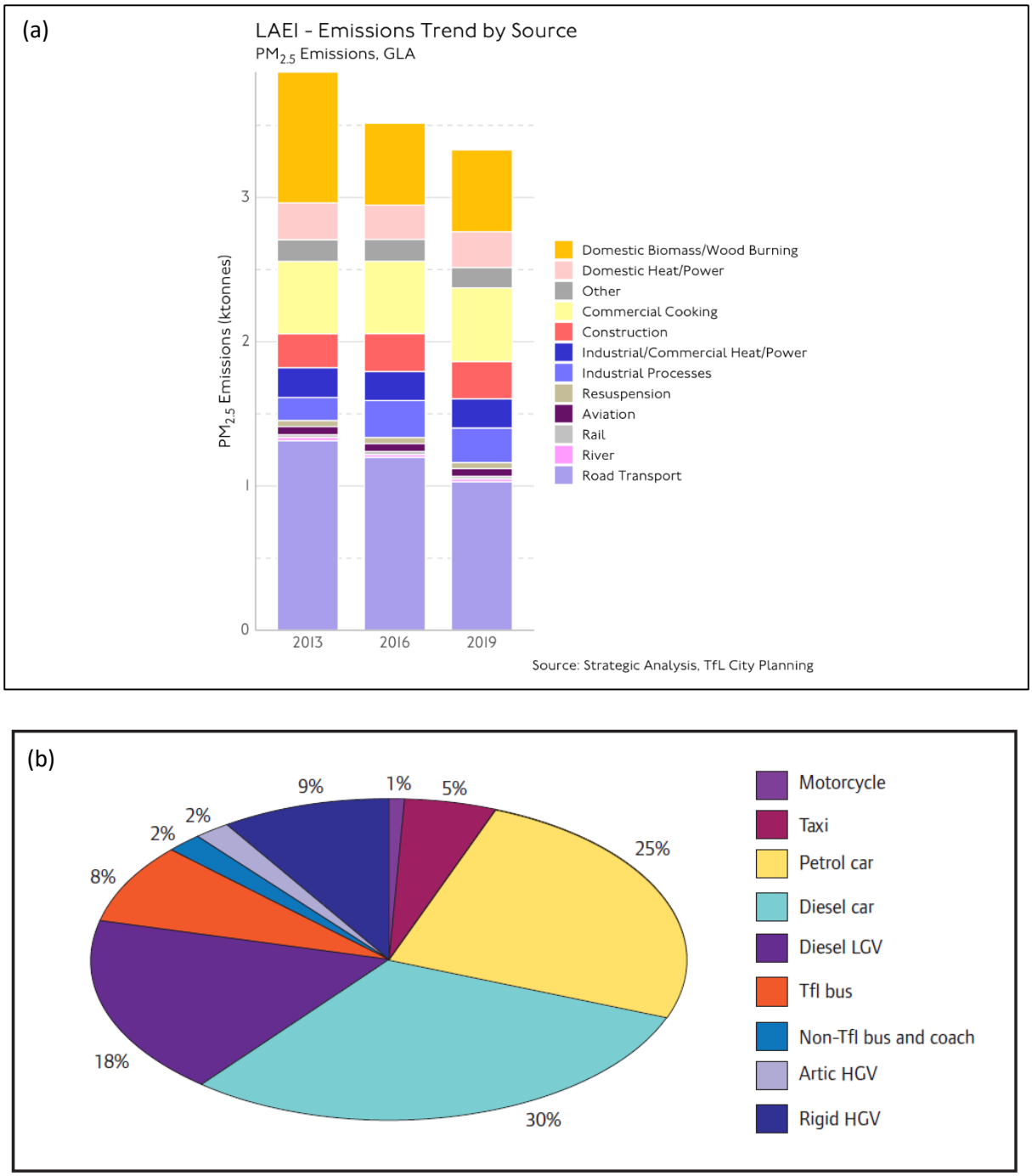


Figure 13 (a) 2019 $PM_{2.5}$ London Emissions by source (LAEI, 2021) and (b) $PM_{2.5}$ LBL Emissions by source (LAEI, 2013)

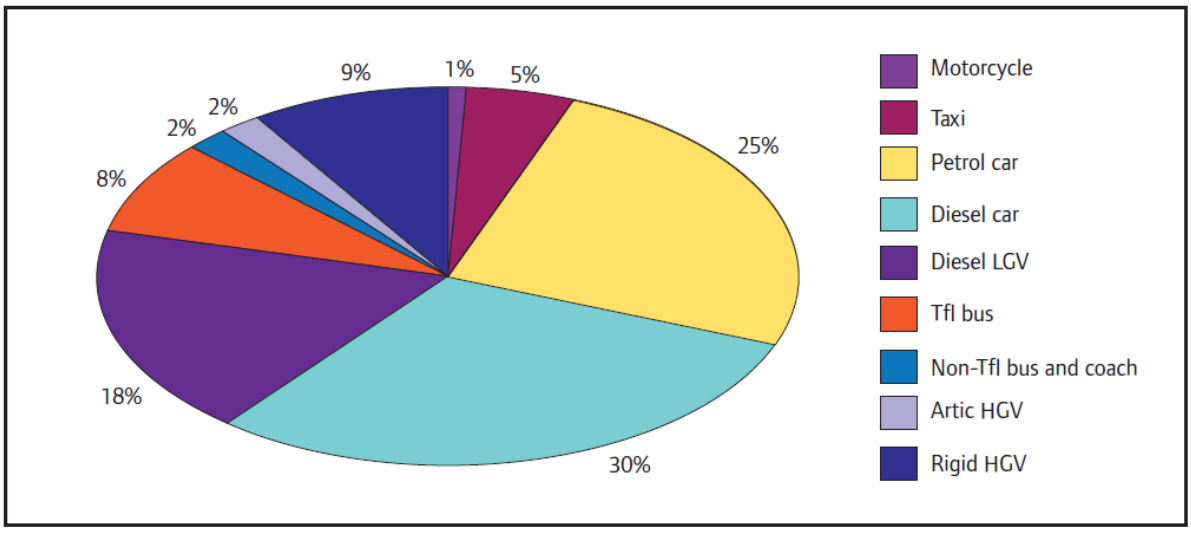


Figure 14 $PM_{2.5}$ Emissions by vehicle type with total emissions from brake, tyres and exhaust (LAEI, 2013)

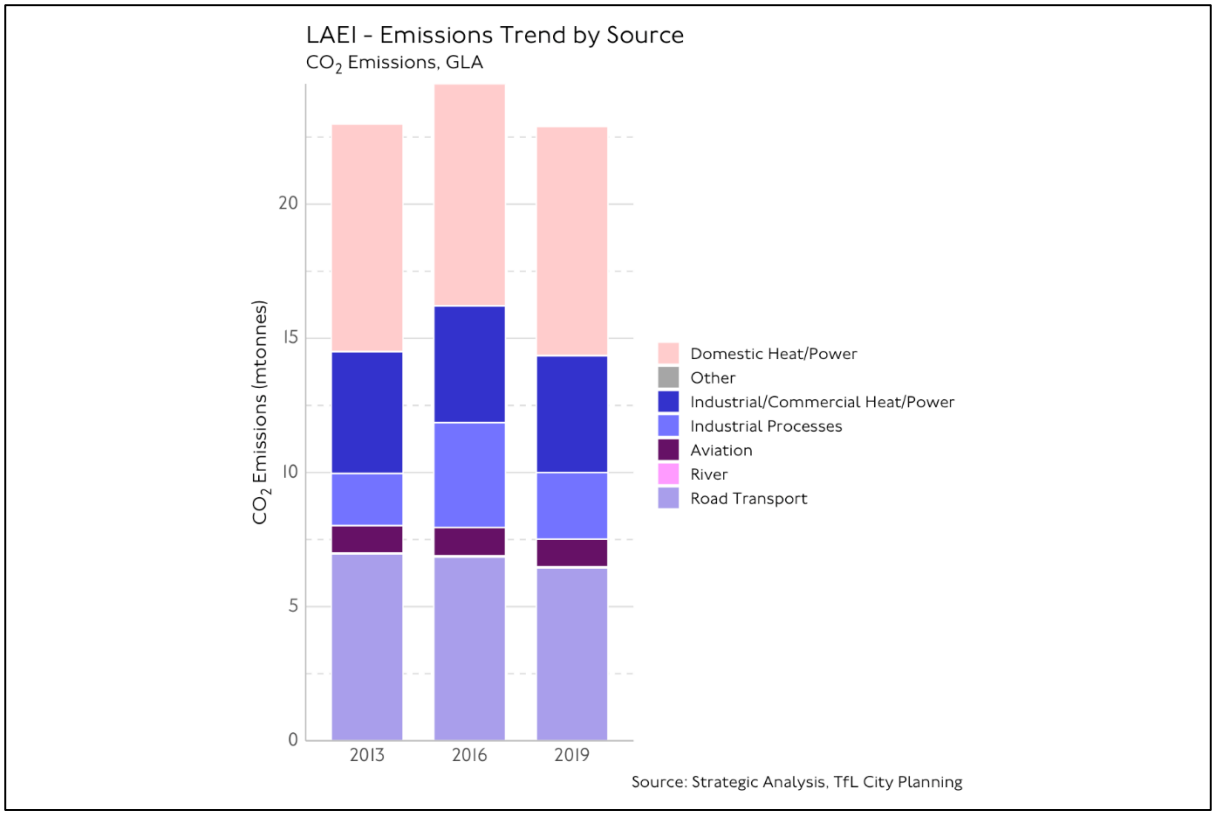


Figure 15 2019 CO_2 London Emissions by source (LAEI, 2021)

2 Our Air Quality Priorities

Our priorities have been updated to include the GLA nine matrix selected measures. A summary of the context for delivery of these in our borough is presented in this section.

This plan should be read in conjunction with other council wide strategies, including those relating to public health, business growth and transport[63] and Corporate Strategy 2018–2022 whish set the priorities for the borough.

The Council's Four-year plan sets out a vision for how we want to support a healthier and better quality of life for Lewisham`s residents and businesses. In order to deliver on these targets, we will work closely with other organisations, and support residents to act.

This AQAP has been developed in tandem with the current corporate priorities via the Borough Plan.

Borough Corporate priorities[64] :

1. **Open Lewisham:** Lewisham is a welcoming place of safety for all where we celebrate the diversity that strengthens us
2. **Tackling the housing crisis:** Everyone has a decent home that is secure and affordable
3. **Giving children and young people the best start in life:** Every child has access to an outstanding and inspiring education and is given the support they need to keep them safe, well and able to achieve their full potential
4. **Building an inclusive local economy:** Everyone can access high-quality job opportunities, with decent pay and security in our thriving and inclusive local economy
5. **Delivering and defending** health, social care and support ensuring everyone receives the health, mental health, social care, and support services they need
6. **Making Lewisham greener:** Everyone enjoys our green spaces and benefits from a healthy environment as we work to protect and improve our local environment
7. **Building safer communities:** Every resident feels safe and secure living here as we work together towards a borough free from the fear of crime.

With the Corporate Strategy we have also published Equality Principles, Partner Statements and Key Pledges for our relationships with Residents, Business and the Voluntary and Community Sector.

[63] *https://lewisham.gov.uk/mayorandcouncil/aboutthecouncil/strategies*
[64] *https://lewisham.gov.uk/mayorandcouncil/corporate-strategy*

We have been and we will continue to work closely with our partners and residents to understand:

- The differing needs of our diverse community
- The differing life chances of individuals and families
- Barriers to equality and improving opportunities and outcomes for all.

Members of the public, local community groups and wider stakeholders will be given the opportunity to have their say on this draft.

The following have been taken into consideration when drafting this plan:

- The Environment Act 1995
- Environment Act 2021
- London LAQM (LLAQM) Framework
- London Environment Strategy
- The new London Plan and the local plan
- Development management planning
- Opportunities for partnership working across Council departments
- Air quality monitoring
- Enforcement
- Planning
- Borough fleet and procurement
- Cycling and walking
- Encourage low emission vehicles for deliveries and via updated parking policies.

The **Environment Act 1995** requires the UK Government to publish a National Air Quality Strategy (NAQS), the latest revision of which was published in 2007 as The Air Quality Strategy for England, Scotland, Wales and Northern Ireland. The NAQS outlines the national air quality objectives, which are set out in the Air Quality (England) Regulations 2000 and Air Quality (England) Amendment Regulations 2002.

In addition, the Air Quality Standards Regulations 2010 (EU Directive 2005/50/EC) sets legally binding targets for additional pollutants, as well as an exposure reduction target for $PM_{2.5}$.

- nitrogen dioxide (NO2);
- particulate matter (PM10);
- sulphur dioxide (SO2);
- carbon monoxide;
- benzene;
- 1,3-butadiene; and
- lead.

The Environment Act 2021[65] instructs the Secretary of State to set a binding target value for $PM_{2.5}$ to replace to existing exposure reduction approach.

[65] *https://www.legislation.gov.uk/ukpga/2021/30/contents/enacted*

London LAQM (LLAQM) Framework[66] requires all local authorities are required to assess and review air quality on a regular basis under the Local Air Quality Management (LAQM) regime. The Mayor of London has powers to intervene and direct local authorities in Greater London. In support of these devolved powers, the Mayor established the London LAQM (LLAQM) framework in 2016 for the coordinated discharge of the Mayor's and borough's responsibilities.

London Environment Strategy was published in 2018 and outlines the Mayor of London's objectives and policies to improve the environment, including those relating to air quality. Its aim is for London to have "the best air quality of any major world city by 2050, going beyond the legal requirements to protect human health and minimise inequalities."

This strategy includes setting new targets for particulate matter, including meeting the 2005 World Health Organization guidelines for $PM_{2.5}$ by 2030. It also sets aims for planning policy in London to address with emissions from developments, including those associated with the construction and demolition phases. Such policies include:

- The requirement for new developments to be air quality neutral;
- The adoption of an air quality positive approach for large scale developments subject to the Environmental Impact Assessment Regulations ;
- Enforcement powers for existing polluting combustion plant, such as Combined Heat and Power (CHP);
- Phasing out of combustion technology for the heating and cooling of new developments; and
- The introduction of a low emission zone for non-road mobile machinery (NRMM).

The National Planning Policy Framework (NPPF) contains a number of policies related to air quality. The NPPF is updated periodically; the following policies concern air quality from the NPPF published in 2021.

The London Plan 2021[67] is part of the statutory development plan for London, meaning that the policies in the Plan should inform decisions on planning applications across the capital. Borough Local Plans must be in 'general conformity' with the London Plan, ensuring that the planning system for London operates in a joined-up way and reflects the overall strategy for how London can develop sustainably.

LBL Local plan[68] - The new local plan will set out a long-term strategy for the next 20 years, from 2020 to 2040.

[66] *https://laqm.defra.gov.uk/air-quality/guidance/technical-guidance/*
[67] *https://www.london.gov.uk/what-we-do/planning/london-plan/new-london-plan/what-new-london-plan*
[68] *https://lewisham.gov.uk/myservices/planning/policy/planning*

Cleaner Air Borough Status[69] was awarded to Lewisham by the Mayor of London in recognition of the efforts made via the AQAP towards tackling air pollution. This status has enabled the Council to bid for additional air quality funding from the GLA. Improving air quality and maintaining Cleaner Air Borough Status by achieving our AQAP actions is a critical priority for Lewisham.

Lewisham Core Strategy[70] - The Lewisham Core Strategy sets out the vision, objectives, strategy, and policies that will guide public and private sector investment to manage development and regeneration in the borough over the next 15 years. The Core Strategy is the key planning document in the Lewisham Local Development Framework (LDF). It sets out the overall ambitions and priorities for the borough, a set of proposals, and a means for making sure that they are delivered.

Lewisham transport strategy and local implementation plan for 2019–2041[71] sets out how we are going to deliver the three objectives of the Mayor's transport strategy in the Lewisham borough. The strategy has three main objectives are healthy streets and healthy people, a good public transport experience and new homes and jobs.

Housing development[72] in the borough encourages local growth, jobs and retention of families and communities but resulting emissions may also have impact on air quality if not managed in an adequate way.

Lewisham Council has met or exceeded the London Plan housing targets for the last 15 years thanks to its progressive and innovative approach to housing. The latest figures – for 2016/17 – are particularly impressive, with the delivery of 1,385 homes, exceeding the target by 29%. 15,000 new homes will be built in Lewisham by 2033 and the council is playing an active role in driving the delivery of these.

Larger scale housing development will be focused within the growth areas of Lewisham, Catford, Deptford and New Cross, and the council has ambitions to create more social and affordable housing as well as new council-owned homes for private rent.

Opportunity areas that have been identified as a focus for new housing and jobs include for Deptford Creek, Riverside (with LB Greenwich), Lewisham, Catford and New Cross. Dealing with Air quality resulting from the development will be one of our key priorities during the course of this action plan.

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[69] *https://www.london.gov.uk/what-we-do/environment/pollution-and-air-quality/working-london-boroughs*
[70] *https://lewisham.gov.uk/myservices/planning/policy/adopted-local-plan/core-strategy*
[71] *https://lewisham.gov.uk/inmyarea/regeneration/transport-and-major-infrastructure/local-implementation-plan*
[72] *This website is run by our economy and partnerships team: https://lewishamlondon.co.uk/interactive-development-map/*

TfL wishes to extend the Bakerloo Tube Line (BTL) to Lewisham to improve connections in southeast London and enable growth in homes and jobs. Lewisham as a terminus via the Old Kent Road and New Cross Gate has been chosen as the best option to achieve those goals, following extensive consultation.

The Core Strategy is based on a vision for the type of place the borough will be in 2026, the key drivers of change which impact on the borough now and in the future, and the need to ensure that any change is maximised for the long-term benefit of all in the Lewisham community. The core strategy forms part of the development plan for the borough, together with the: Site Allocations Local Plan, Lewisham Town Centre Local Plan, Development Management Local Plan and London Plan.

The following table ranks our air quality priorities for the 2022-2027.

Table 2.1 Lewisham Air quality Priorities for 2022-2027

Priorities No.	Priorities Title	Description
1	Communication and Raising Public Health and Awareness	Lewisham has already produced a Joint Strategic Needs Assessment (JSNA) for Air Quality, which as part of this Action Plan will be periodically reviewed. The Public Health and Environmental Protection Teams will work together in raising awareness on air quality issues. Working closely with the Lewisham council's communications team, we will use several readily available resources to raising awareness of health impacts of air quality and monitor these health impacts more closely. Available resources for use will include. • Greater London Authority (GLA) alerts; we will retweet the Mayor of London's alert from @MayorOfLondon and use our own social media to share the messaging. We will share the alert email with available contacts. These will include GPs, care homes, nurseries, and other vulnerable groups; we will continue to promote the Mayor's air pollution forecasts. These will include GPs, Pharmacies, care homes, nurseries, and other vulnerable groups; we will continue to promote the Mayor's air pollution forecasts in other groups and businesses. • The Imperial College London Air webpage, which is a useful tool for finding out about current pollution levels across London. We will provide links to this website on our webpage. • We will promote free sign up to our Lewisham app. The app is a phone app for anyone to download providing a branded presence on people's phones and it is an app which the Council can control, pushing messages to advertise events, news items, consultations etc. It also gives a direct line to all users and also gets ongoing stats about engagement, which is hard to measure with other mediums. The App is also promoted to the respiratory nurses as well to raise awareness amongst COPD & Asthma patients and their carers. We will continue supporting alerts services such as Lewisham App and promoting the Mayor's air pollution forecasts. We will also promote to sign our clean air pledge.

Priorities No.	Priorities Title	Description
		• Free pollution alerts on the airTEXT website or similar technologies available in Lewisham. AirTEXT provides a map showing forecasts of expected air quality over the next three days in London, to enable you to plan ahead. Lewisham council will subscript similar technologies to increase the reach. • the school pollution helpdesk and share the GLA schools toolkit to be used by schools to improve air quality and • The GLA air quality webpage as a good starting point to find out about air pollution in London and the action the Mayor is taking. Around a period of high pollution, we will share information on the causes of pollution within LBL and link to services, schemes or toolkits that are working to provide solutions. We will work with Lewisham Clinical Commissioning Group (CCG) to continue to raise awareness, so that the GPs promote our Lewisham App to Chronic obstructive pulmonary disease (COPD) and asthma patients and their carers. We will continue to work with GLA's idling action project to promote stopping idling in the borough, particularly in front schools, nurseries, and businesses in the borough. We will continue to work with CRP to work with local businesses to raise awareness on clean air villages and routes. Consideration will be given to improving promotion and engagement activities and increase projects involving businesses, organisations, institutions and community groups to raise awareness about air quality. If funding allows us to, our intention is to undertake a campaign on different air quality related issues and specifically at locations where vulnerable groups can be found.
2	Minimising emissions from new developments	In Lewisham's Core Strategy [73] one of the visions of the borough is that by 2026:

[73] *https://lewisham.gov.uk/myservices/planning/policy/adopted-local-plan/core-strategy/about-our-core-strategy-for-the-local-development-framework*

Priorities No.	Priorities Title	Description
		'The north of the borough has been transformed by the regeneration of large strategic sites that will provide new places for people to enjoy, and new facilities to support existing and new communities.' A major area of development for the next 5-year period of this AQAP will be the opportunity areas [74]that have been identified as a focus for new housing and jobs. The area includes for Deptford Creek, Riverside (with LB Greenwich), Lewisham, Catford, New Cross and the expansion of Bakerloo Tube Line (BTL). A priority for this AQAP is therefore to provide development, through construction and build, which minimises emissions through effective planning policy, development management and environmental protection enforcement. As part of this priority Lewisham, through future London's Mayor Air Quality Funding (MAQF) or other sources of funding, is seeking to still establish, monitor and enforce a Zonal Framework Construction Logistics Plan for the Evelyn and New Cross area. This will seek to reduce the impact and emissions from vehicle movements to and from construction sites in the area. As part of this action, we will be enforcing the Non-Road Mobile Machinery (NRMM) Low Emission Zone.
3	Expanding the Council's Sustainable Transport Infrastructure	LBL is prioritising the reduction of emissions from road traffic and to that end supports the necessary infrastructure required to support the uptake of ultra-low emission vehicles, and also to facilitate cycling, walking and the use of public transport. The Council is working with partners to increase the number of electric vehicle charging points accessible to residents and businesses within the borough. Lewisham currently has 100 plus electric vehicle charging points within the borough, accessible to all residents who are registered with Source London[75]. Usage is continually reviewed, and identification of new locations will consider residents requests through Source London. Consideration of non-obstruction of pedestrian pathways and pathways for wheelchairs will be considered during the design of electric vehicle charging points.
4	Collaboration with the GLA and other London Boroughs on Air Quality Initiatives	Lewisham is part of the London Low Emission Construction Partnership, which is an MAQF project, which aims to reduce emissions from the construction industry. It is also part of the South London Cluster Group, where Local Authority Officers meet and considers cross borough working on air quality projects. We will seek to maintain and strengthen links with others, including the GLA, where it is of benefit to bringing improvement to the residents of Lewisham.

[74] *https://lewishamlondon.co.uk/interactive-development-map/*
[75] *www.sourcelondon.net*

Priorities No.	Priorities Title	Description
5a	School action plan	Reducing pollution in and around schools and extending school audits to other schools in polluted areas
5b	Infrastructure	Improving walking and cycling infrastructure
6	Energy	Promoting and delivering energy efficiency retrofitting projects in workplaces and homes
7	EV Infrastructure	Installing Ultra-Low Emission Vehicle (ULEV) infrastructure
8	Pedestrianisation	Regular car free days/temporary road closures in high footfall areas
9	Borough fleet	Reducing emissions from the borough fleet
10	Smoke Control Zones	Promoting and enforcing Smoke Control Zones

3 Development and Implementation of our AQAP

3.1 Consultation and Stakeholder Engagement

In developing/updating the action plan we have worked with other local authorities, agencies, businesses, and the local community to improve local air quality. Schedule 11 of the Environment Act 1995 requires local authorities to consult the bodies listed in Table 3.1.

Effective communication, engagement, and consultation it is of paramount importance to ensuring that this AQAP fulfils its goal in producing quantifiable outcomes as presented in Table 4.1 to timescale from all stakeholders and delivery partners who have an influence on air quality within the borough and outside the organisation.

We will develop a plan that will enable us to communication, engagement, and consultation with the public and any interested party during the development and implementation of this AQAP. We will get the involvement of local communities, volunteers, businesses, schools and institutions, and organisations to support the plan and help with campaign, events, and training, as necessary.

We will undertake the following stakeholder engagement:

- Publicity on website and social media ,
- Articles in local newspaper,
- Online questionnaire to local residents and businesses to seek opinions on actions.
- Healthy Lungs tent/poster where possible, raising issues and highlighting Council's action.

The response to our consultation stakeholder engagement will be given in Appendix A of this report.

Table 3.1 Consultation Undertaken

Yes/No	Consultee
	The Environment Agency
Yes	Transport for London and the Mayor of London (who will provide a joint response)
Yes	All neighbouring local authorities
Yes	Other public authorities as appropriate
Yes	Bodies representing local business interests and other organisations as appropriate

3.2 Steering Group

The following internal Council teams will be engaged through a Steering Group and specialist Working Groups:

Development Control, Planning Policy, Project Management, Public Health, Procurement and Legal, Energy and Efficiency, Travel Demand Management, Fleet Services, Transport Planning (including Sustainable Transport).

The purpose of the group will be to consider all the actions proposed by the GLA and to review the potential for incorporating these within Lewisham's AQAP. The meetings will be also used to highlight existing and potential future projects that are being carried out (or considered) by other teams which could have air quality benefits and scope for inclusion in this AQAP.

It will be a good opportunity to build relationships and alignment between teams, and for responsibility for different actions to be owned by relevant teams. This will assist with the yearly reporting of actions and it is anticipated that the Group will meet on a regular basis to provide input and feedback and ensure communication channels are maintained.

The challenge will be providing realistic monitoring criteria that can be managed resource wise and we will be working with GLA in refining this aspect during the Action Plan period.

The following meetings/workshops (Table 3.2) have been held to discuss the AQAP: Locations/ Purpose/ summary of activities pushed forward in the implementation of this AQAP. All virtual Team meetings were organised and chaired by the manager of the Environmental Protection team manager Dr Eliane S. Foteu M.

Table 3.2 List of Design Meeting with Internal Stakeholders

Date	Title Meeting/Service	Time	Type or purpose
02/11/2020	Correspondences to all internal stakeholders	NA	Via email about the intention to review the plan
17/12/2020	Air Quality Working Group Meeting	11:00-12:00	Team meeting
11/01/2021	Public Health	16:15-17:17	Service specific AQAP measures.
12/01/2021	Parks & Regeneration Planning and development	15:00-16:00	Service specific AQAP measures
13/01/2021	Housing Private Sector (Environmental Health Residential)/Private Sector Housing (Grants) Climate Resilience	15:00-16:00	Service specific AQAP measures.

Date	Title Meeting/Service	Time	Type or purpose
19/01/2021	Parking Enforcement Transport	11:00-12:00	Service specific AQAP measures.
25/01/2021	Procurement and Commercial Services	12:00-13:00	Service specific AQAP measures.
	Environmental Health		
	Environmental Protection		
	Communication teams		
	Crime Enforcement Regulation (CER)		
	Fleet (S.G.M Environment)		
01/02/2021	Parking	14.30-15.30	AQAP and new parking proposals
	Highways and Transport (head)		
	Environmental Health(head)		
	Director of Public Realm (Director)		
	Environmental Protection		
03/02/2021	Transport	14:00-15:00	Discussion/some Transport measures
04/02/2021	Procurement and Commercial Services	12:00-13:00	Social value/KPIs
22/02/2021	Environmental Health and Public health	14.30-15.30	AQAP / GLA meeting follow up
25/11/2021	Sustainable Developments Select Committee	18.00-20.00	AQAP Consultation Briefing post consultation
31/03/2022	Health Protection Committee	10.00-11.15	Sign off
31/05/2022	Air Quality Strategic Board / Working Group Meeting	13.30-14.00	Final AQAP and sign off
08/06/2021	Executive Management Team	10.50-11.00	AQAP Consultation Briefing post consultation and sign off
21/06/2021	All Member Briefing	TBC	AQAP Consultation Briefing post consultation and sign off
20/06/2021	Sustainable Developments Select Committee	19:50-20:50	Sign off
6/07/2022	Lewisham Mayor and Cabinet approval	18:05-18:10	Final AQAP and sign off

4 Action Plan Table

Table 4.1 shows the London Borough of Lewisham AQAP. It contains:

- A list of the actions that form part of the plan.
- The responsible individual and departments/organisations who will deliver this action.
- Estimated cost to the council.
- Expected benefit in terms of emissions and concentration reduction.
- The timescale for implementation
- The outputs, targets, and Key Performance Indicators
- How progress will be monitored.

Evaluation Methods: Impact-Cost-timescale of Implementation

The actions presented in Table 4.1 are evaluated in relation to their expected impact on: (1) air quality (i.e., reduction in emissions or concentrations); (2) cost; and (3) timescale for implementation.

- Air quality impacts have been classified to represent '**very low** 'to '**high'** impact. The higher the impact, the greater the improvement in air quality, i.e., the greater the reduction in NO_2 and/ or PM_{10} concentrations. For each action, the expected reduction in annual mean pollutant concentrations has been determined based on professional judgement, drawing on experience gained from other studies, as well as the LLAQM Borough Air Quality Action Matrix as published by the GLA.

- The implementation of the measures set out in this Action Plan are dependent on the resources required to deliver the programme. In line with current London Technical guidance, it is not necessary to carry out a detailed cost-benefit analysis. Rather the aim is to provide a broad indication of costs so that the proposed measures can be ranked according to the cost and the expected improvement to air quality.

The following classification scheme has been used for air quality impacts, cost, and timescale for the implementation of the measures:

The assessment of air quality impacts, cost, and timescale each action is variable and presented in Table 4.1.

Class	Air Quality Impact	Cost in £000's	Timescale for the implementation of the measures
Very Low	0 No indirect and direct impacts on air quality	£10 and less **(£)**	N/A
Low	1 Improvements are unlikely to be detected within the uncertainties of monitoring and modelling	£10 - £50 **(££)**	N/A
Medium	2 Perceptible (a demonstrable improvement in air quality). An improvement of up to 5% of the objective (2µg m^{-3}), which could be shown by a modelling scenario.	£50 – 500 **(£££)**	N/A
High	3 Significant. Improvement of more than 5% of the objective (2µgm^{-3}). Can be clearly demonstrated by modelling or monitoring (a significant improvement is likely to be delivered by a package of options rather than by a single intervention)	< £500 **(££££)**	N/A
Short-term	N/A	N/A	Ongoing or Within 1-2 years **(ST)**
Medium-term	N/A	N/A	within 2-5 years **(MT)**
Long-term	N/A	N/A	6+ years. **(LT)**

Table 4.1 Air Quality Action Plan

The actions have been grouped into seven categories: Monitoring and core statutory duties; Emissions from developments and buildings; Public health and awareness raising; Delivery servicing and freight; Borough fleet actions; Localised solutions; and Cleaner transport. LBL will continue to search for more funding and resources to work with all stakeholders and the community to improve air quality to make Lewisham a cleaner borough. The action plan considers measures and actions in terms of costs, effectiveness, time-scales and feasibility of implementation. We cannot guarantee that we will be able to do everything that is presented in this plan immediately. However, we will work hard to achieve our duty, the aim and objectives of this plan. For example, LBL does not have full control on external sources of funding and the future implementation of the LIP ongoing/planned projects as an example will depend on the availability of the appropriate level of TFL funding.

Action		Measure description	Responsibility	Cost *Very Low=≤£10 K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	**ID**							
Air Quality (AQ) Monitoring	1.A	Maintaining and where possible expanding monitoring networks. Combined with other LA statutory duties, maintaining monitoring	EP[76]/ Transport	££ to £££ Additional external funding will be needed to expand the network further.	0–1	(ST). Project specific air quality monitoring regime to be reported elsewhere.	All outputs and KPIs will be in accordance to London Local Air Quality Management (LLAQM) Framework[77]. **KPIs include:**	The locations of monitors across Lewisham will be made available on LBL website[78]. The "Love Clean Air" website79 also presents all air quality data and industrial

[76] *EP=Environmental Protection Team*
[77] *https://www.london.gov.uk/what-we-do/environment/pollution-and-air-quality/working-london-boroughs*
[78] *https://lewisham.gov.uk/myservices/environment/air-pollution/check-air-quality-levels*
[79] *https://lovecleanair.org/local-air/air-quality-map/#.YeFnrf3KnPk*

Action		Measure description	Responsibility	Cost *Very Low=≤£10K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	**ID**							
		networks is critical for understanding where pollution is most acute, and what measures are effective to reduce pollution.					Up to 75 further monitors will be deployed during the course of this Plan. We will use Template reports and KPIS provided by the GLA/DEFRA or other relevant parties involved. Maintaining all existing reference-level monitoring and	processes for Lewisham and south London. We will give monitoring priority to focus areas, sensitive receptors like schools, care homes and Hospitals. London Atmospheric Emissions Inventory (LAEI)

Action		Measure description	Responsibility	Cost *Very Low=≤£10K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	**ID**							
							achieving over 90% data capture	figures including new GLA focus areas will be published by end of 2022. Lewisham will work toward achieving the new 2021 WHO guidance and monitor pollution in areas with high deprivation.

Action		Measure description	Responsibility	Cost *Very Low=≤£10K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	**ID**							
								Partnership with citizen science[80] will be considered to tackle urgent environmental challenges through research, education, and community engagement.

[80] *https://earthwatch.org/research/research-focus-areas?gclid=EAIaIQobChMI0IryoNeu9QIVE4xoCR1lzgojEAAYASAAEgIQnvD_BwE*

Action		Measure description	Responsibility	Cost *Very Low=≤£10K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	**ID**							
AQ Monitoring	1.A.1	**NO_2 diffusion tubes**	EP/ Transport	££	 There is indirect emissions concentrations benefit. LBL considers that taking	(ST)	All outputs and timeline of reporting will be as agreed with all parties involved. We will update diffusion tube locations periodically to reflect changes in the	In 2018, the network was extended to include 50 sites. In September 2020, further 51 diffusion tubes were installed across Lewisham as part of the Low Traffic Neighbourhood (LTN) project[81];

[81] *https://lewisham.gov.uk/articles/news/changes-to-lewisham-and-lee-green-low-traffic-neighbourhood-announced*

Action		Measure description	Responsibility	Cost *Very Low=≤£10K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	**ID**							
					cleaner routes to school can dramatically reduce exposure, several recent exposure studies suggest that switching from main roads to quiet		environmental settings. Some historical tubes are to remain to fulfil the objective of the monitoring. **KIPs:** We will aim for: • Over 95% data capture.	which makes a total of 101 diffusion tubes (excluding the duplicates) installed across the borough. The continuity of the later monitoring regime will depend on funding. We will install more diffusion tubes in the most

Action		Measure description	Responsibility	Cost *Very Low=≤£10K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	**ID**							
					backstreets can reduce exposure by up to 50%.		• Produce an inventory of the number of monitoring sites and regularly review as appropriate. •In 2021, the ASR was submitted as agreed with the GLA.	deprived areas across the borough.

Action		Measure description	Responsibility	Cost *Very Low=≤£10 K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	**ID**							
AQ Monitoring	1.A.2	**Borough's automatic monitors**	EP/ Transport	££ to £££	0–1 No direct emissions, but critical in terms of understanding continuous, short term and long-term	(ST)	All outputs and KPIs will be produced as recommended by GLA/DEFRA and the LLAQM scheme. We will Continue to monitor via 4 automatic monitoring stations and help with the Imperial College London supersite at	The addition of further $PM_{2.5}$ monitors will depend on funding.

Action		Measure description	Responsibility	Cost *Very Low=≤£10K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	**ID**							
					emissions and concentrations and the impact of air quality action taken.		located Honor Oak Park[82]. Priority will be given to seeking funding for new $PM_{2.5}$ monitors, to help with assessing compliance with meeting the new	

[82] These form part of a £6m investment into three new air quality supersites– established by the Natural Environment Research Council (NERC).These site were established by the Natural Environment Research Council (NERC) in June 2019. The other sites are located in Birmingham and Manchester.

Action		Measure description	Responsibility	Cost *Very Low=≤£10 K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	**ID**							
							WHO targets by 2030. We will support all research projects as appropriate.	
AQ Monitoring	1.A.3	**Real time trialling monitoring using Sensors** There are uncertainties	EP/ Transport / Community & Cultural Development	££ to £££ Additional external funding will be needed.	0 Quantification of emissions	(ST)	All outputs and reporting to be agreed with all the parties involved. All project specific reports will be made available on our	Examples of trialling sensors installed or to be installed in Lewisham include: Three Breathe London community

Action		Measure description	Responsibility	Cost *Very Low=≤£10K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	**ID**							
		associated with these new technologies, which have not yet been validated for regulatory usage.[83]			reductions is difficult as it will depend on the scheme being undertaken and on the reliability of the results from the		website for consultation by the public. Specific KPIs include: • Over 60% data capture and • Assess the effectiveness of	sensors and AQ map[84] and our exiting three AQY air quality sensors installed around the LTN scheme[85] Further deployments are planned between 2022 and 24 as

[83] Please refer to the guidance under development by Defra's independent Air Quality Expert Group (AQEG) https://uk-air.defra.gov.uk/library/aqeg/pollution-sensors.php
[84] https://www.breathelondon.org/
[85] https://www.campbell-associates.co.uk/product/aqy-micro-air-quality-monitor

Action		Measure description	Responsibility	Cost *Very Low=≤£10K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	**ID**							
					monitors are.		sensors to monitor the success of the relevant interventions that is being implemented.	part of our 2022-24 Neighbourhood Community Infrastructure Levy (NCIL) Community Projects[86].
AQ Monitoring	1.A.4	At a minimum, working towards meeting interim WHO targets for $PM_{2.5}$ by 2030	All	££to ££££	2	(ST)	Outputs, KPIs and reporting per the Environment Act 2021[87]	LBL will follow all the policies, regulation and guidance associated with the

[86] E.g. Bell Green Neighbourhood Forum Air Monitoring Network (BGNF) (Bellingham Project, Perry Vale Project and Sydenham Project)
[87] https://www.legislation.gov.uk/ukpga/2021/30/section/2/enacted

Action		Measure description	Responsibility	Cost *Very Low=≤£10K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	**ID**							
							Maintain the existing PM2.5 monitors. LBL will be compliant with the targets legislated in the Environment Act 2021.	Environment Act 2021. If the Environment Bill does not include current WHO targets for $PM_{2.5}$, LBL will continue the work toward reducing this pollutant.
Core statutory duties	1.B							

Action		Measure description	Responsibility	Cost *Very Low=≤£10K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	**ID**							
Core statutory duties	1.B.1	Annual Status Report (ASR)	Environmental Protection/ Transport	£	 This action allows for a much deeper understanding of annual trends across the borough for better actions.	(ST)	Submission and review following comments on the report by GLA/DEFRA and publication on our website. **KPI as:** All ASRs submitted on time, approved by GLA and published on our website.	The impacts of COVID-19 and the associated restrictions on activities may impact the reporting process.

Action		Measure description	Responsibility	Cost *Very Low=≤£10K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	**ID**							
Core statutory duties	1.B.2	Update AQAP every five years at a minimum and follow LLAQM guidance	EP/ Transport	£	2	(LT)	This plan will be reviewed before end 2027. **KPI as:** • Meet AQAP submission deadline • Deliver a wide-reaching public consultation • Publication on website • Report on	The review will follow the prescribed GLA/DEFRA guidance at the time. Our AQMAs will be undertaken before December 2024 and every four years after.

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Category	**ID**							
							progress annually via the ASR.	
Emissions from developments and buildings	2	Ensuring emissions from construction are minimised	Planning/ EP /Transport	£ to ££££ Ongoing resource required from Transport	2 Examples include:	(ST) Already in operation. Impact of reduction	Adoption of new Lewisham Local Plan by 2022/23. • Continue to Work closely with Planning to reduce	We will adopt air quality mitigation measures for all developments. We are compiling a Local Plan that will address all the

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Category	ID							
				and Environmental Protection to review and make recommendations regarding the discharge of conditions.	• Flexible and can ensure developments are best practice even at long-running developments. • This will constitute clear requirements on	will be ongoing.	dust from construction activities. We will continue using our planning powers to enforce air quality measures, reduce emissions, increase energy efficiency and adoption of Planning Policy that is encouraging car-free developments.	issues relevant to sustainable development. Register of NRMM are secured in planning conditions with Construction Environmental Management Plans (CEMPs). An overall reduction of the

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Category	**ID**							
					developers and a level playing field for all developers.		• Statistical data to be included in ASR. • Log, investigate and enforce all complaints. **KPIs include:** • 100% of all major planning consents to have appropriate air quality and dust conditions imposed. Enforcement action	current LAEI construction related PM_{10} &$PM_{2.5}$ emissions is anticipated.

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Category	**ID**							
							considered where breaches are identified. • Maintain register of pollution control conditions • Reduction in complaints.	

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Category	**ID**							
Emissions from developments and buildings	3	Ensuring enforcement of non-road mobile machinery (NRMM) air quality policies	Planning/ EP	£££ Ongoing resource required from Environmental Protection to review.	2	(ST) Condition already introduced. Impact of reduction will be ongoing.	We will aim to register 100% of major developments for NRMM. A quarterly compliance report will be produced. LBL achieved 100% site compliance in 2020. **KPIs include:**	LBL is part of a pan-London project MAQF NRMM Zone enforcement – to inspect construction sites in every borough, to ensure they are using the cleanest construction equipment.

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Category	**ID**							
							Data on number of NRMM conditions recorded, and 100% of sites checked on the NRMM database once construction begins. Data on enforcement to be maintained.	
Emissions from developme	4	Reducing emissions from CHP and enforcing CHP air	Planning/ Community & Cultural	£: Ongoing resource required from	0–1	(ST)	We will aim to recommend ultra-low to zero emission	Planning to refer relevant discharge of conditions to EP. The EP team

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Category	**ID**							
nts and buildings		quality policy. Ensure smaller developments use ultra-low NOx Boilers or other zero carbon low emission options.	Development	Environmental Protection to review.			combustion plant for all developments. **KPIs include:** • Number of conditions requiring high efficiency boilers and ultra-low NOx boilers or other low carbon low emission heating	will continue to review air quality assessments/energy strategies to ensure compliance. We will Investigate setting a requirement for evidence of maintenance of CHPs.

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Category	**ID**							
							• Number of secondary heat sources integrated into heat networks. • Number of existing combustion-based CHP engines removed/replaced with cleaner, lower carbon heat sources.	This will include the replacement of conventional gas boilers with air source heat pumps at St Laurence Church and Community Centre, Catford as part of our NCIL Air Quality & Community Funding Pot 2022-2024 Projects.

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Category	**ID**							
Emissions from developments and buildings	5	Enforce Air Quality Neutral policy	Planning/ EP/transport /Climate Resilience	£: Ongoing resource required from Environmental Protection and Planning Team.	1	(ST). Already in operation.	100% of relevant applications undertaking an Air Quality Neutral Assessment Report statistics on compliance via the ASR and the planning portal. **KPIs include:** We will determine the number of	We will include Air Quality Neutral requirements in the Council's Local Plan Policies.

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Category	**ID**							
							development proposals meeting the air quality neutral standards.	
Emissions from developments and buildings	6	Ensuring adequate, appropriate, and well-located green space and infrastructure is included in new and existing developments	Planning / Community & Cultural Development	££	0–1	(ST)	• Regularly produce map of green space. • Area of green space incorporated into new developments and apply London Plan Policy principles in development opportunities.	Ensuring that exposure in amenity spaces is considered at the design stage and as part of the Air Quality assessment for new development and

Action		Measure description	Responsibility	Cost *Very Low=≤£10K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	**ID**							
							KPIs include: • Numbers of proposals or projects where green infrastructure is used or enhanced to provide low exposure walking and cycling routes. • For stand-alone green infrastructure projects consider using exposure	redevelopment proposals. • Proportion of major planning applications where green amenity spaces are in areas of low exposure. Further measure are being considered in the new Strategy for

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Category	**ID**							
							reduction targets as project KPIs.	Parks & Open Spaces. We are investing in green spaces across the borough including new green spaces such as Charlottenberg Park in New Cross, as well as the transformation of Beckenham Place Park and the introduction of the Greening Fund

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Category	**ID**							
								that allows local community groups to bid up to £40,000 for green infrastructure[88]. Several green infrastructures will be implemented across Lewisham as part of our NCIL Air Quality & Community

[88] https://lewisham.gov.uk/inmyarea/openspaces/parks/beckenham-place-park

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Category	**ID**							
								Funding Pot 2022-2024 Projects.
Emissions from developments and buildings	7	Ensuring that Smoke Control Zones are appropriately identified and fully promoted and enforced.	Environmental Protection /Crime Enforcement Regulation (CER)	£: Ongoing resource from the teams involved.	2	(ST); The whole of borough is already a Smoke Control	Respond and report on complaints and action taken. To include: an awareness campaign, engagement with	We will record all complaints of dark smoke investigated within a standard timeline by the

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Category	ID							
			/Food and safety			Area. (Smoke Control Order 2010).	suppliers, and active enforcement and campaign initiated by end 2022. • Develop information packs and plan engagement with businesses, residents and other members of the public. • All fuel suppliers in	enforcement team as appropriate. • Enforcement action taken where appropriate. • Annual reports of smoke control areas and clean air complaint to be procured. We will continue to search funding to carry out other work and be part of the London

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Category	**ID**							
							the borough engaged, and 50% showing point of sale information about cleaner fuels. 100% of black smoke complaints investigated. **KPIs include:** Environmental Health Officers/Trade Standard officers to be trained for	wood burning group. • Residents engagement via council newsletter articles, and press release with local papers. • Further details will be provided in LBL Local plan (ongoing).

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							enforcing the new AQ solid fuel regulations starting May 2021. • Reduce the number of smoke related complaints by 50%. • Estimated reach of awareness campaigns	

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							• Number of suppliers engaged. • Increases in the number of enforcement visits/actions taken. • Number of Officers trained in enforcement	
Emissions from developme	8	Promoting and delivering energy efficiency and	Climate Resilience/ GLA /	£: Ongoing resource from	3	(ST).	We will produce yearly statistics and/or qualitative	Tracks the percentage of the boroughs social

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nts and buildings		zero carbon retrofitting projects in workplaces and homes, including through using the GLA RE:NEW and RE:FIT programmes, where appropriate, to replace old boilers /top-up loft insulation incombination		Sustainable Resources Team. Additional external funding will be needed.		Review date of April 2022 for potential projects.	data on actions taken to raise awareness, number of complaints and enforcement actions taken by the council. **KPIs include:** • Reduce CO_2 emissions by 40% by 2025 and being Zero-Carbon by 2050.	housing stock which has been updated through the RE: NEW scheme. (GLA) • Increase in the number of vulnerable households accessing external grant funding for heating, insulation and ventilation works.

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Category	**ID**							
		with otherenergy conservation measures.					• No. of schemes using RE:FIT and RE:NEW, as the programme guarantees the amount of CO_2 emissions reduced (GLA)	
Emissions from developments and buildings	8.1	Develop and implement strategies for decentralised energy that convert gas	Climate Resilience Team/Planning	£££	2	(LT)	Development and Adoption of Decentralised energy strategy by end 2022.	Heat networks form an important part of the LBL's plan to reduce carbon and cut

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Category	**ID**							
		heating to low and zero carbon alternatives including heat networks, and upgrade existing large combined heat and power communal heating to cleaner technology alternatives.					**KPIs :** We will use indicators to be included in the strategy to monitor progress.	heating bills for customers.
Emissions from	8.2	Introduce a requirement	Private Sector/Hous	Ongoing resource	2	(LT)-term	We will keep a register of all private	Lewisham intends to apply to the

Action		Measure description	Responsibility	Cost *Very Low=≤£10K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	**ID**							
developments and buildings		for a minimum EPC rating for privately rented sector HMOs covered by both the mandatory and additional licensing schemes. Introduce a requirement	ing (Environmental Health Residential)	from Private Sector Housing (Environmental Health Residential)			rented properties with minimum EPC rating. We will promote the regulation Energy Performance Regulation requirement. The target is to help all disabled facilities across the borough to meet level D EPC rating in privately	Secretary of State at the Ministry of Housing, Communities and Local Government for a borough-wide licensing scheme for privately rented with the intention to rolling out licensing to all 26,000 privately rented properties in the borough.

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Category	**ID**							
		for any works covered by the Disabled Facilities Grant or discretionary housing improvement grants to meet level D EPC rating in privately owned accommodation.					owned accommodation and report annually. **KPIs include:** • Number of commercial and residential properties with minimum Energy Performance. • Number of private properties with disabled facilities	

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Category	**ID**							
							that meet level D EPC rating in privately owned accommodation. • Number of commercial and residential landlords spoke to or number of event to promote the regulation.	
Emissions from developme	9	Master planning and redevelopment	Planning/EP/transport/Energy/Clima	£££ to ££££	3	(LT)	Reporting as recommended in the London Plan	• We will ensure that the planning teams considers

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nts and buildings		areas aligned with Air Quality Positive and Healthy Streets approaches.	te Resilience/ GLA/ TfL	We will engage with GLA and TfL resources to support the development and deployment of these policies.			approved in December 2020. • Report via the ASR and the planning portal the number of developments where air quality was considered at the design stage. **KPIs include:** Air Quality Positive specific metrics of	new policies on air quality positive and healthy streets at an early stage in the development of plans. We will aim to log all applications with 100% Target.

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							success will be expected to be proposed for each selected measure, and more detail on this will be provided in new Guidance accompanying the London Plan.	
Emissions from developments and buildings	9.1	Installation of residential electric charge points on new developments	Planning/Parking/Transport	Ongoing resource from Planning, Parking	1	(LT) For all planning major site	We will monitor and report on: the proportion of electric vehicles: number of lampposts or	We will locate electric charging points in a way that does not interfere with

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Category	**ID**							
				and Transport.		developments 20% active charging points and 20% passive installed.	equivalent infrastructure which have been modified to enable EV charging; the number of rapid chargers installed; and the usage of existing EV chargers from the CPs in the borough. Adoption and publication of the Low Emission	people walking or those with disabilities passing with wheelchairs. We currently have 153 charging points across the borough with 40 more to be implementation in 2022/23.

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							Vehicle Charging Strategy to ensure that everyone in the borough is no further than 500m from an electric vehicle charge point by 2022. Then expansion of the electric vehicle charging points throughout the borough with at least 10 per year	

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Category	**ID**							
							depending on funding.	
Public health and awareness raising	10	Public Health department taking shared responsibility for borough air quality issues and implementation of Air Quality Action Plans/ we will ensure that Directors of Public Health	Environmental Protection/Public Health	£	1–2	(ST). Already provided as part of the consultation for this document We will complete	• Public Health is represented at Air Quality working Group. • Pharmacy and prescribers – to provide air quality information to Public Health to distribute to relevant groups.	• Clinical commissioning Group (CCG) - This has a two-part objective, to raise awareness in a phased timeline to reach the following: -Deliver awareness training to the CCG.

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		(DsPHs) have been fully briefed on the scale of the problem in our local authority area; what is being done, and what is needed.				our air quality School Action Plan identifying measures to be taken to reduce pollution around school. We will discuss potential follow up to vulnerable	• Provide further material for engagement with vulnerable groups and active travel work. **KPIs include:** • Health Protection Committee will be required to sign off all Annual Status Reports and the	- Discuss asthma and air quality. Looking at how key messages can be included into the school asthma guidelines and raising awareness sessions.

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Category	**ID**							
						groups' workshops and consider additional groups.	Director of Public Health will sign off the air quality action.	
Public health and awareness raising	**10.1**	The Council's political leadership will champion the issue of air quality inside and outside of the borough.	Members of the Council, as designated	Ongoing resource from Members in exercising this role.	1–2	Recommended by the Sustainable Development Scrutiny Committee and approved by	Report back to GLA on review and outcome with actions, then recruited more School Air Quality Champion to:	We will:- • Promote the Lewisham Air App, airTEXT and similar resources as a way to reduce

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Category	**ID**							
		Our previous Air Quality Champion, Cllr Louise Krupski was appointed in May 2018, and has actively been engaging with the community, schools, and construction companies to promote actions				M&C with a promotion campaign ongoing.	• Raise awareness of local air quality by speaking to individuals and providing promotional materials. • Take part in air quality activities and events, where appropriate. **KPIs include:**	exposure to air pollution. • Promote awareness of Sustainable transport alternatives. • Periodically report in writing or email on the activities undertaken as part of the programme.

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Category	**ID**							
		to help reduce air pollution across the borough. Our new Air Quality Champion Cllr Yemesi Anifowose will continue this work.					• Lewisham Mayor's Air Quality Champion will continue working with the School Air Quality Champions in collaboration with the working group, providing material and offering support and training as appropriate.	

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Category	**ID**							
							• We will keep record of air quality champions recruited and report on actions carried out throughout the year.	
Public health and awareness raising	11	Engagement with businesses/Public Health Teams will be supporting engagement with local stakeholders (businesses,	Public health /EP	Ongoing resource from Public Health and other teams involved	1–2	(ST) Different initiatives being considered and developed	We will continue to use several readily available resources (e.g. GLA pollution alerts, airText and Imperial College London Air webpage) to raise	We will :- • Search for more funding for further School Superzone projects.

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Category	**ID**							
		schools, community groups and healthcare providers). The support will be via the DsPHs when projects are being developed.				over period of Action Plan.	awareness about the health impacts of air quality, and monitor these health impacts more closely. • Information and promotion packs to reduce emissions from business activities. Direct contact will be limited at first due to social distancing (if	• record the number of schools taking part in School Superzone project and reporting if funding becomes available

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Category	**ID**							
							any at the time). • Promotion via business engagement team • Continue to distribute leaflets at events and stands • Funding app message services such as the Lewisham App • Re-publicising the Mayor's social media pollution alerts through the	

Action		Measure description	Responsibility	Cost *Very Low=≤£10K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	**ID**							
							communication team and social media channels.	
Public health and awareness raising	**11.1**	Director of Public Health to have responsibility for ensuring their Joint Strategic Needs Assessment (JSNA) has up to date information on air quality	Public Health/Environmental Protection	Ongoing resource from Public Health and Environmental Protection Team	1–2	(ST). Already have a JSNA.	• ASR Report reviews and update and • JSNA update – with appropriate air quality considerations. **KPIs include:**	• Health and Wellbeing Strategy delivery plan will be reviewed for 2018 – 2020 to incorporate air quality. Appointing one Consultant grade

Action		Measure description	Responsibility	Cost *Very Low=≤£10K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	**ID**							
		impacts on the population Strengthening coordination with Public Health by ensuring that at least one Consultant grade public health specialist within the borough has air quality responsibilities					Report back on projects to GLA through ASRs. ~~• 0~~ JSNA to be reviewed and updated by end 2021. • Minutes of AQ working Group.	is part of the health protection remit. The ASR and AQAP Will be signed off at Health Protection Committee.

Action		Measure description	Responsibility	Cost *Very Low=≤£10K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	**ID**							
		outlined in their job profile. Director of Public Health to sign off Statutory Annual Status Reports and all new Air Quality Action Plans					• Public Health chair the AQ working Group. • At least one PH specialist has air quality in their objectives The Job specification of at least one specialist to comply with requirement and actions included in work plan i.e. Health in all policy portfolio.	

Action		Measure description	Responsibility	Cost *Very Low=≤£10K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	**ID**							
							• Signed AQAP and ASRs as of when completed through Health Protection Committee	
Public health and awareness raising	**11.2**	Engagement with businesses – Delivery and Servicing Plans (DSP) delivered through Planning process	EP/ Public Health/ Transport/ Planning	Dependent on project initiated	2	DSP Condition already introduced. Different initiatives being considered	Successful implementation of Cleaner Air Villages (CAVs) projects and reporting back to the funders and all relevant parties by due date.	Report back on future projects to the funders (DEFRA/GLA). Lewisham is part of the CAV4 to be implemented from 2022-2024.

Action		Measure description	Responsibility	Cost *Very Low=≤£10K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	**ID**							
						and developed over period of Action Plan.	KPIs are as identified in each project description. Number of applications for the discharge of the DSP condition approved.	
Public health and awareness raising	11.3	Raise awareness on the impact of indoor air quality on human health	Environment protection/Public Heath	£	2	(ST)	Compile and publicise information leaflet on indoor air	We will raise awareness on Indoor air pollution in homes,

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Category	**ID**							
							quality improvement. **KPIs include:** Information pack compiled and made available on our webpage by end of 2021	workplace and other buildings.
Public health and awareness raising	12	Supporting a direct alerts service such as Lewisham App or	Environmental Protection/	Ongoing resources from Environme	2	(ST). We will use all the	• Information and promotion packs. • Promote via Public Health, schools and	The Healthy Living Pharmacy (HLP) framework is aimed at achieving

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Category	**ID**							
		AirText, and promotion and dissemination of high pollution alert services	Public health / Communication	ntal Protection Team.		resources readily available to communicate and raise awareness.	business engagement. • Disseminate leaflets to Pharmacies – via Healthy Living Pharmacy. • Continue to distribute leaflets at events and stands. • Funding the app message service. • Re-publicising the Mayor's social media pollution	consistent provision of a broad range of health promotion interventions through community pharmacies to meet local need, improving the health and wellbeing of the local population and helping to reduce health inequalities.

Action		Measure description	Responsibility	Cost *Very Low=≤£10K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	**ID**							
							alerts through communications and social media channels. •Number of subscribers, Sign-ups to the app or similar alert systems in the borough • Engagement with vulnerable groups • Estimated reach of pollution alerts	

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Category	**ID**							
							within the borough (via social media etc.)	
Public health and awareness raising	12.1	Engaging with communities through the work of the Borough of Culture 2022[89] (BoC) and monitoring	Public Health	££	2	(ST)	As required by the bid. **KPIs include**:	This work was deferred to 2022 due to Covid-19. This is now ongoing.

[89] https://www.london.gov.uk/what-we-do/arts-and-culture/current-culture-projects/london-borough-culture/london-borough-culture-winners-2022-and-2023

Action		Measure description	Responsibility	Cost *Very Low=≤£10K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	**ID**							
		number of bids for: a call to action on climate change/working together to deliver change.					Report back on projects to GLA through ASRs". Report and increase on number of people signed up to Lewisham Air App. • Sign-ups to in the borough. • Engagement with vulnerable groups. • Estimated reach of pollution alerts within the borough	

Action		Measure description	Responsibility	Cost *Very Low=≤£10K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	**ID**							
							(via social media etc.) • Reduction in hospital admissions.	
Public health and awareness raising (School)	13	Encourage schools to join the TfL STARS accredited travel planning programme by providing information on the benefits to schools	Transport/ Public Health	£££	2	(ST) Already in operation with 80% of schools in the borough having an accreditation in 15/16	• Continue to promote the Schools STARS scheme. • Create activities to promote a sustainable and safe approach to travel. • Work with school	Complete and adopt our School air quality Action Plan. We currently have 19 Gold accredited schools across the borough. We will enable some

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Category	**ID**							
		and supporting the implementation of such a programme					to encourage schools to engage with the STARS scheme and gain accreditation. **KPIs:** • Accredit at least 2 schools per year • Increase the number of school travel plans to with Gold and Silver Status in Lewisham	schools to share their good news stories and activities - via the STARS website.

Action Category	ID	Measure description	Responsibility	Cost *Very Low=≤£10K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
							• Monitor measures identified by the School Action Plan.	
Public health and awareness raising (schools)	14	Complete and adopt the draft LBL Air Quality School Action Plan School-specific actions are included in the	EP/all	££ to £££	2	(ST).	Complete the LBL school action plan that will be used to monitor progress of measures implemented across the schools located in Lewisham and	All schools will be offered Bikeability [90]training for, children and young people who live in the borough. Balance bike and/or Scooter training is an

[90] https://lewisham.gov.uk/myservices/roads-and-transport/cycling/free-cycle-lessons

Action		Measure description	Responsibility	Cost *Very Low=≤£10K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	**ID**							
		draft LBL action plan.					adopt by December 2021. Specific school actions to be started by end 2021 include: • Encouraging schools to compile an in house Action Plan using prescribed GLA	annual offer to schools for their lower school pupils.

Action		Measure description	Responsibility	Cost *Very Low=≤£10 K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
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							Helpdesk Toolkit and advice. • Air Quality Monitoring in/around schools. • Feasibility of further School Superzone project. • Idling Action Events and workshop on air quality	

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							• Carry out other air quality audits around schools in Lewisham where nitrogen dioxide concentrations are the highest (in accordance with the GLA audit toolkit). • School Streets, temporary road closures and	

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							restrictions for parking with more than two per year to increase the current 47 school streets (plus 4 planned in 2022/23 with more to come). • Greening around schools:	

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Category	**ID**							
							• School Streets and restrictions for parking: • Carry out a feasibility study for the creation of a fleet of electric school vehicles for disabled/vulnerable children.	
Delivery servicing and freight	15	Update local authority procurement	Procurement and	£ Ongoing resources	1–2	Review policies including	Contract managers will together monitor whether the social	We will consult and work with service users,

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Category	**ID**							
		policies to include a requirement for suppliers with large fleets to have attained silver Fleet Operator Recognition Scheme (FORS) accreditation and incorporate the use of the Social Value tool kit for the delivery of additional	Commercial Services	from Procurement Team		PPQ and ITT by end 2021 for implementation beginning 2022 Yearly review of our internal procurement handbook and training contract	value stipulations may increase costs going forward. We will (1) raise awareness about sustainability during procurement buying events (online) to all vendor; (2) consider how what is proposed to be procured can improve the economic, social	communities and the supply market to improve the design and production of our works and services contracts that have an impact on the community so that outcomes are delivered in the most efficient manner, including through innovative solutions.

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Category	**ID**							
		economic, social and environmental benefits that can be created from the 4 objectives and associated KPIs.				managers about air quality consideration in procurement.	and environmental well-being of our communities; (3) work with communities and suppliers to identify any specific needs and how well-being can be improved through our procurement activities and (4) we will lead by example by routinely considering social	At all times, we will ensure that procurement requirements focusing on social value are relevant and proportionate, reflecting need and the nature of the supply market.

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							value outcomes available from the procurement of goods, works and services and asset disposal in all contracts over £50,000, as well as at lower levels where specific opportunities exist. **KPIs:**	

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							A new Social Value policy at Lewisham was developed and adopted on the 6 February 2019 which covers these requirements and therefore will be included (where relevant) in each procurement under the relevant KPI for Social Value. The standardised	

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Category	**ID**							
							templates will also cross-refer to the policy; •Publication of new procurement strategy to include pollution reduction measures by end of 2021; • Number of contracts with air quality requirements included;	

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Category	**ID**							
							• We will report on a number of events • LBL council will use their procurement policy and purchasing power to influence and incentivise suppliers to use cleaner vehicles wherever possible and provide a report in due course.	

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Category	**ID**							
Delivery servicing and freight	16	Reducing emissions from deliveries to local businesses and residents	Procurement Team	Ongoing resources from Procurement Team and Energy Efficiency	1–2	Asset Management Strategy 2015-2020 produced.	• Inclusion of Air Quality considerations in updated Procurement Strategy by end of 2021. • Rigorous vehicle standards included within procurement policies. • Number of contracts with air quality requirements included.	• Consider and completion of all Business Engagement Projects. • Promote the switch to lower emission vehicles, adopting smarter practices and reducing freight movements by better use of consolidated trips

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Category	**ID**							
							KPIs as: • No. of businesses participating in projects or changing their fleet. • Progress on project - Number of residents engaged - Number of businesses engaged	• Cleaner vehicles and consolidated deliveries, such as EV-only loading bays, ULEV only areas • A shift to electric vehicles is encouraged through the ongoing expansion of our charging network.

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Category	**ID**							
							- Number of new charging infrastructure - Number of EV's installed	The Low Emission Vehicle Charging Strategy aims to ensure that everyone in the borough is no further than 500m from an electric vehicle charge point.

Action		Measure description	Responsibility	Cost *Very Low=≤£10K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	**ID**							
Delivery servicing and freight (Borough)	16.1	Feasibility study of borough-wide freight to support consolidation (or micro-consolidation) of deliveries, by setting up or participating in new logistics facilities, and/ or encourage businesses to participate in these.	Transport/ Procurement and EP	On going resources fromTransport and Procurement Team Additional external funding will be needed.	1–2	(ST)	Feasibility report with KPIs and targets to be compiled by the end of 2022.	This action is pending the availability of appropriate funding. We will apply for future DEFRA funding to implement this measure.

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Category	**ID**							
Borough fleet actions	17	Increasing the number of hydrogen, electric, hybrid, bio-methane and cleaner vehicles in the boroughs' fleet. Accelerate uptake of new Euro VI vehicles in borough fleet.	Fleet (S.G.M Environment)	££££ Additional external funding will be needed.	2	(ST)	• Review use of electric pool cars for staff use and procuring more vehicles by end 2022. • Review Staff Travel Plan to include travel payments to incentivise use of cleaner vehicles and minimise mileage and investigate tax benefits of electric	• Publication of new procurement strategy to include pollution reduction measures by end of 2021. • Incentivise providers of passenger transport to use electric/low emission vehicles through the procurement

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Category	**ID**							
							vehicles versus fossil fuelled vehicles – include salary sacrifice schemes for employees – by Mar 2022. **KPIs as:** • Lead by example and increase the no. of ULEV in council owned fleet by 80% by 2022	process – Mar 2022.

Action		Measure description	Responsibility	Cost *Very Low=≤£10 K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	**ID**							
							Report on the number of new Euro VI vehicles in borough fleet. Fleet will be 100% compliant with ULEZ by 2025. The whole fleet will be zero emission by 2030.	

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Category	**ID**							
Borough fleet actions	17.1	Reducing emissions from Council fleets by Smarter Driver Training, or equivalent, for drivers of vehicles in borough fleet i.e. through training of fuel efficient driving and providing regular re-training of staff.	Fleet (S.G.M Environment)	£££: Ongoing resources from Fleet Team	1	(ST)	Training still on-going to meet legal requirements. This training is mandatory for vocational drivers (HGV and PSV) and is organised by the environment division not by personnel. **KPIs include**: Amount of training provided, and feedback given.	

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Category	**ID**							
Localised solutions	18	Expanding and improving green Infrastructure across the borough and in localised areas with high level of pollution (e.g. around the south circular for example)	Parks & Regeneration/ Planning	£££ Ongoing resource required from Parks to review and make recommendations. Additional external funding will	1 Green infrastructure schemes can transform urban areas and help to provide improved public spaces.	Ongoing/ (ST). Already in operation. Impact of reduction will be ongoing.	• Investigate options for green infrastructure in schools located in areas of higher pollution as part of the school action plan by Mar 2023. • Assess the greening opportunities in pollution hotspots and Focus Areas and seek funding to	Whilst it can be hard to quantify air quality exposure improvements from such schemes it may be useful to consider such schemes as part of the Healthy Street Approach or to look at the measures of success built into Green

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Category	**ID**							
				be needed.			deliver this, in addition to greening and improving clean air routes away from busy roads. **KPIs include:** • No. of Green Infrastructure projects implemented by the council • No. of trees planted.	Infrastructure proposals. We will use the GLA 2019 guideline document "*Using green infrastructure to protect people from air pollution*" and other trial green technologies like CityTree benches/trees

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							• Adoption of the new parks and green space strategy to be delivered by end of year 2021 and to include measures to address air pollution and improve air quality i.e. tree planting, promotion of walking and cycling.	

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Category	**ID**							
Localised solutions	19	Low Emission Neighbourhoods (LENs) or/and Business Low Emission Neighbourhood (BLEN)	EP/Transport	££££ Additional external funding will be needed.	1 In combining measures locally, cumulative reductions will be achieved, which will be measurable.	(LT) Not being considered for this Action Plan, unless specific resources become available.	• Carry out feasibility study into the viability of a LEN/BLEN in one of Lewisham's pollution hotspots • Implementation of LEN/BLEN in Lewisham where funding identified. **KPIs include:** • Quantifiable reduction in	LEN/BLEN in pollution hotspots. Table 1.1 presents some past and current projects undertaken on GLA focus areas. Area 133 (Brockley Road (B218) between Adelaide Avenue and Wickham Road will be

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Category	**ID**							
							pollutant emissions in most of the borough LEN/BLENs is anticipated. A further indicator of success for other boroughs is development of outline ideas/plans.	considered for localised projects. There are mixed views on LTNs across the Borough, comments noted and already considered in the draft plan. Lewisham supports the implementation of measures which

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Category	**ID**							
								aim to reduce the number of unnecessary car journeys and reduce through traffic from using smaller roads. Speed enforcement is undertaken by the Police.
Localised solutions	19.1	Work with all the relevant organisations to	GLA/TFL/ Transport/EA	££ to ££££	3	(ST)	Ella Adoo-Kissi-Debrah, who lived near the South	Up to 75 other monitors will be deployed across

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		improve air quality on strategic roads such as the South Circular and other major roads around.		Additional external funding will be needed.			Circular Road in Lewisham, died in 2013 and Southwark Coroner's Court found that air pollution "made a material contribution" to her death. The following measures will be taken by LBL to comply with the Coroner's recommendations	the borough an around the south circular to increase understanding of air pollution. A Breathe London monitor was also installed at the vicinity of the South Circular in June 2021 and will be used to monitor emission in real time.

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							presented in the prevention of future deaths report[91]. • One of the key areas of concern raised by the Coroner centres on the issue of a lack of public awareness about the health effects of air pollution,	The LBL AQ Working Group will oversee the implementation of the recommendations from the prevention of future deaths report following the inquest in 2020.

[91] https://www.judiciary.uk/wp-content/uploads/2021/04/Ella-Kissi-Debrah-2021-0113-1.pdf

Action		Measure description	Responsibility	Cost *Very Low=≤£10K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	**ID**							
							including low awareness of sources of information and action that could be taken to reduce personal exposure. It was recognised that, due to the scale of the challenge, this needs to be addressed by all levels of government.	The expansion of the Ultra-Low Emission Zone (ULEZ) is discussed in action 21.2 and other possible local projects to reduce emissions on major roads will be given consideration. .

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							•Lewisham Council to continue disseminating the Mayor's existing moderate and high pollution alerts as well as by supporting and promoting a direct alert service such as Lewisham App, AirText and GLA alerts. •Lewisham Council to ensure	

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Category	**ID**							
							information about air pollution and how to avoid exposure is provided to residents, especially those most vulnerable, via local public health channels.	
Cleaner transport: Policy	20.0	Ensuring that transport and Air Quality policies and projects are integrated.	EP	££££	2	(ST)	Effective communication between teams will be achieved by ensuring that (1) air	We will ensure that there is effective communication between those managing air

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Category	**ID**							
		Ensure that the Head of Transport has been fully briefed on the Public Health duties and the fact that all directors (not just Director of Public Health) are responsible for delivering them, as well as on air					quality risks are fully evaluated in all transport feasibility studies/ proposals and (2) that regular briefings are provided to the Transport Team on local air quality issues and projects. **KPIs include:**	quality issues within the borough and those managing traffic and travel.

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		quality opportunities and risks related to transport in the borough.					Heads of Transport will sign off AQAPs/ASRs and review them annually. We make it a requirement for an air quality official to attend transport steering groups/forums, and vice versa.	

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Category	**ID**							
Cleaner transport: Zoning	20.1	Lobbying/working with TfL on: Speed control measures on more Strategic roads, and Low Emission Zones. E.g. lowering the legal speed limit to 20mph in built up residential areas.	TfL/GLA	£££ Ongoing resources from Transport Team	2	(ST) .	Reduction of overall vehicle speed and driver fines in all Lewisham roads. General speed reduction and speed fine on all roads.	

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Category	**ID**							
Cleaner transport: Programme	21	Discouraging unnecessary idling by taxis and other vehicles and carry out a Council wide anti-idling campaign discouraging unnecessary idling around all venerable receptors.	Environmental Protection/ Transport Enforcement / Communication	££££ Ongoing resources required from Environmental Protection and Communications Team	2	(LT)	Report back to GLA on review and outcome of campaign to discourage idling. • Participate in the Pan London Anti-Idling Project to raise awareness and include enforcement. • Reduce emissions from Taxis and other vehicles idling	This anti-idling project involves 27 boroughs and will build on the previous MAQF idling project, continuing the idling action volunteer events to engage the local community. In addition engaging and training for fleets

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Category	**ID**							
		Idling Action Events/workshops and enforcement around schools.					unnecessarily through raising awareness and taking enforcement actions. • Continue training Enforcement Officers on car idling and how to issue parking fines. • Advisory notes to be issued to drivers and enforcement officers to issue	(both borough and commercial); school assemblies and workshops to create anti idling banners; development and implementation of a wider communications/ advertising strategy to raise awareness and further increase outreach for the

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							fines for idling offences. • Where marketing campaigns are undertaken the effects of these could be tracked; the number of hospitals displaying anti-idling videos for example; and; • Regular meetings and formal processes in place	campaign; a research project investigating the impacts of idling and behaviour change; and enforcement work to be done by the boroughs. **School specific KPIs include**: Number of:

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Category	**ID**							
							to ensure effective communications. **KPIs as:** • 100% of complaints about idling followed up with enforcement visit • Number of vehicles asked to stop idling • Number of notices issued for vehicle idling and near	• Idling Action Events, • School Workshops, • Business engaged and fleet trained. • Advertising Campaign. • Research Project output. • Staff undertaking on-street enforcement

Action		Measure description	Responsibility	Cost *Very Low=≤£10K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
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							schools • Where marketing campaigns are undertaken the effects of these could be tracked; the number of hospitals/petrol stations displaying anti-idling videos for example. • Monitoring along the lines of Idling Action Days will be considered.	

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Category	**ID**							
							• We will focus on enforcing idling on pollution hotspots and transport hubs and other vulnerable receptors for example.	
Cleaner transport: Programme	**21.1**	Increasing the proportion of electric, hydrogen and ultra-low emission vehicles in Car Clubs.	Transport/ Planning	££ Additional external funding will be needed.	2	(ST)	**KPIs include:** Proportion of electric, hydrogen and ultra-low emission vehicles in Car Clubs	

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Cleaner transport: Programme	**21.2**	Working with TFL to promote car scrappage schemes or other retrofit technologies and lobbying government to provide funding for car scrappage schemes.	Transport/TfL	££ Additional external funding will be needed.	2	(ST)	Report yearly statistics of car resident/businesses who have participated in the scheme on a yearly basis. We will carry out more research of retrofit technologies and publish on our website. **KPIs include:**	The ULEZ expansion up to, but not including, the North and South Circular Roads comes into force on 25 October 2021. On Friday 16/07/2021, the Mayor announced an additional £5 million in funding for his scrappage schemes to help

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Category	**ID**							
							Increase in the number of cars scrapped/with retrofits with time.	more low income and disabled Londoners switch to cleaner vehicles. More information and eligibility is available on the TfL website[92].

[92] https://tfl.gov.uk/modes/driving/ultra-low-emission-zone/car-and-motorcycle-scrappage-scheme

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Category	**ID**							
Cleaner transport: Programme	**22**	Pedestrianisation: Temporary car free days and pedestrian Days (e.g. no vehicles on certain roads on a Sunday) and similar initiatives.	Transport / Environmental Protection	££ Additional external funding will be needed.	2	Review opportunities through community groups.	• We will increase the number of schools taking part in a school-managed play street and the number of community play streets. • We will target approximately 10 school play streets and 30 public play streets to start with. • We will also facilitate community	

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							car free days in September 2021 subject to resources. KPIs include: Number of school street/plays streets and community event undertaken. We currently have 47 school streets with four more due before the end of the year 2022/2023	

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Category	**ID**							
							(we will aim to add at least three more per year).	
Cleaner transport: Infrastructure	22.1	Pedestrianisation / Traffic calming measures/Road system redesign.	Transport /TfL	£££-££££	2–3	(LT) to (LT)	Project specific outputs and targets to be agreed in due course. **KPIs include:** Count/scale of the infrastructures implemented.	See action 14 for street closures around schools.

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Cleaner transport: Infrastructure	22.2	Pedestrianisation/ Lee Green Low Traffic Neighbourhood (LTN)	Transport / Environmental protection	£££-££££ Additional external funding will be needed.	2–3	(MT) to (LT)	As part of the LTN, LBL has been developing and implementing a range of measures to help mitigate against some of the effects of the COVID-19 pandemic as well as for strategic benefits (e.g. safer streets, encouraging more walking/cycling/ public transport and	Project specific outputs and targets to be agreed following public consultation. These interventions focused on ensuring the public have enough space to socially distance as well as improving safety for the higher

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Category	**ID**							
							improving air quality). **KPIs:** Improvement of the following metrics and ensuring no loss of benefits through continuing to assess impact on: • Air quality data; • Traffic flow and speed data on	volumes of pedestrians and cyclists during the lockdown period

Action		Measure description	Responsibility	Cost *Very Low=≤£10K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	**ID**							
							Lewisham managed roads; • Bus journey times and traffic flow/ congestion levels on Transport for London (TfL) managed roads; and • Initial feedback from the project pages on Commonplace.	

Action		Measure description	Responsibility	Cost *Very Low=≤£10K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	**ID**							
Cleaner transport: Policy	23	Using parking policy to reduce pollution emissions and adoption of low charges at existing parking meters for zero emission cars. There will be emissions based parking for Short Stay Parking and for motorcycles.	Transport/ Parking Enforcement	££ This involves a CO^2 based regime on short stay parking visitors, in order to deter the use of such vehicles and reduce.	2	(ST) Only achieved through the cashless meter model.	Report to GLA through ASRs. We will update the existing parking strategy to include air quality considerations. The surcharge proposed should encourage a shift to cleaner vehicles. By encouraging electric vehicles, the	It is hard to measure the emissions reduction from parking surcharges directly. However, it is expected that measures such as surcharges for diesel vehicles could lead to a drop in the overall number of higher polluting vehicles in London.

Action		Measure description	Responsibility	Cost *Very Low=≤£10K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	**ID**							
				The emissions arising. In addition a levy on diesel vehicles is proposed.			borough is also promoting a solution. **KPIs:** • Monitoring parking levels of most polluting vehicles. • Proportion of residential permits issued to both most polluting and cleanest vehicles.	The annual parking report provides data and breakdown of vehicle types against total permits issued.

Action		Measure description	Responsibility	Cost *Very Low=≤£10K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	**ID**							
							• Comparison of charges with other boroughs. • Achieving the 500m radius by the end of 2021. •Number of parking charges.	
Cleaner transport: Traffic management	23.1	Emissions based parking for Short Stay Parking and for motorcycles.	Transport/ Parking Enforcement	£££	2	(ST)	This proposal considers the particular adverse environmental and health impacts of fossil fuel emissions	This is aimed at tackling air pollution by encouraging people to switch to less polluting

Action		Measure description	Responsibility	Cost *Very Low=≤£10K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	ID							
							on short stay parking and proposes implementing an emission based parking regime similar to that for parking permits within Lewisham. More information on this measure is	models or more sustainable forms of transport. It will also bring all motorcycle parking charges in line with other vehicles, which have had emissions-based permits since last year.

Action		Measure description	Responsibility	Cost *Very Low=≤£10K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	**ID**							
							available via our website[93].	
Cleaner transport: Traffic management	23.2	Controlled Parking Zone Extension for Climate Change Emergency.	Transport/ Parking Enforcement	££	2 There would be a by-product of increased income associated	(ST): To start in later 2021/22	Our target is to meet the challenge of the Climate change in Lewisham. **KPIs include:** Number of permits issued	Extending our CPZs borough wide would be a key tool as part of the Councils approach to tackling the Climate Emergency and

[93] https://councilmeetings.lewisham.gov.uk/mgAi.aspx?ID=26630

Action		Measure description	Responsibility	Cost *Very Low=≤£10K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	**ID**							
					with this corporate objective.			reducing the impact of the car on the environment and health.
Cleaner transport: Traffic management	23.4	Enhanced parking enforcement for Safer Lewisham and to improve walking and cycling.	Transport/ Parking Enforcement	££. This would need to include relevant revenue costs such as staff,	2 This would primarily be targeted towards improving road safety	(ST)	We will provide a report of number of accidents that occur before and after the implementation of the traffic management measure and assess the	More information about this is available on our website. Discouraging the use of car by parking enforcement

Action		Measure description	Responsibility	Cost *Very Low=≤£10K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	**ID**							
				licensing, IT etc. but is used elsewhere with considerable success.	and reducing injuries within the borough and meeting our and the Mayor for London's targets.		effectiveness in increasing road safety and improve air quality. **KPIs include:** Number of accidents; Report on yearly enforcement actions taken.	should encourage walking and cycling and reduce vehicle emissions.

Action		Measure description	Responsibility	Cost *Very Low=≤£10K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	**ID**							
Cleaner transport: Infrastructure	24	Installation of Ultra-Low Emission Vehicle (ULEV) infrastructure. The installation of rapid chargers to help enable the take up of electric taxis, cabs and commercial vehicles (in partnership with TfL and/or	Planning/ Parking/ Transport	£££-££££ Additional external funding will be needed.	1–2	(LT) We are already in communication with TfL about rapid charging points in potential for establishing points.	**KPIs include:** Number of charging points installed per year including (electric vehicle charging points, rapid electric vehicle charging point and hydrogen refuelling stations). We currently have more than 100	The number of new charging points will depend on planning obligations. We will aim to install at least five per year. Via the planning process, we will recommend, one Electric Vehicle charging point per dwelling

Action		Measure description	Responsibility	Cost *Very Low=≤£10K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	**ID**							
		OLEV[94]). This action is not related to new development					charge points (a combination of 50kw, 7kw and 5kw points)[95]. Adoption and publication of the Low Emission Vehicle Charging Strategy to ensure that everyone in the	with dedicated parking or one charging point per 10 spaces (unallocated parking) for all new residential developments. For commercial development, 10% of parking spaces

[94] Office for Low Emission Vehicles (OLEV)
[95] https://lewisham.gov.uk/myservices/roads-and-transport/sustainable-transport/our-long-term-strategy-for-low-emission-vehicles

Action		Measure description	Responsibility	Cost *Very Low=≤£10K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	**ID**							
							borough is no further than 500m from an electric vehicle charge point by 2022. Followed by, depending on available funding, rapid expansion of the electric vehicle charging network throughout the borough with an absolute minimum of 10 charging points per year.	to be provided with Electric Vehicle charge points. Our intention is to install 40 in 2022/23

Action		Measure description	Responsibility	Cost *Very Low=≤£10K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	**ID**							
Cleaner transport: Programme	**24.1**	Continue campaigns to promote the use of electric charge points within the borough.	Parking/ Transport/ Environmental Protection/ Communications	££££ Ongoing resource from Transport and Parking	2 Having a strategy policy which allows for further growth in EV charging points when a certain number of electric vehicles are	(LT)	**KPIs include:** • Monitoring proportion of electric vehicles registered by residents in the borough. • Monitoring proportion of lampposts or equivalent infrastructure which have been modified to enable EV charging and the	

Action		Measure description	Responsibility	Cost *Very Low=≤£10K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	**ID**							
					registered in an area allows for continued growth of the new technology. An app based booking system allows users to see other nearby charging		number of rapid chargers installed • Monitoring the usage of existing EV charges from the CPs.	

Action		Measure description	Responsibility	Cost *Very Low=≤£10 K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	**ID**							
					stations should one already be in use upon arrival.			
Cleaner transport: Infrastructure	**25**	Provision of infrastructure to support walking and cycling	Transport/ Planning	£££-££££ Additional external funding will be needed.	1–2 Reducing car use is one of the best ways to cut both	Ongoing (subject to TfL funding/ priorities)	Targets as presented in the cycling strategy. Reported to TfL through a LiP yearly report.	It is difficult to quantify with certainty the reduction in emissions as this depends on many other factors.

Action		Measure description	Responsibility	Cost *Very Low=≤£10 K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	**ID**							
					emissions. Sustainable Travel Towns studies show that car driver distance could be reduced by five to seven per		**KPIs:** Targets [96]as presented in the cycling strategy and the LiP yearly report. Current target are as follow. With the base year (2017) and target year (2021):	The cycling strategy looks at where cycling in the London Borough of Lewisham (Lewisham) is at and where it aspires to take it in the near future.

[96] https://councilmeetings.lewisham.gov.uk/documents/s51611/05%20Lewisham%20Cycle%20Strategy%202017%20Summary%20200717.pdf

Action		Measure description	Responsibility	Cost *Very Low=≤£10K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	**ID**							
					cent, which can provide large reductions in NOx/PM emissions.		Daily cycle journeys is 183911 for base and 370002 for 2021, Cycling to work is 4.0% for base and 3 10.0% for 2021, Casualty rate is 2.25 for base and 1.16 for 2021 and Cycling to school is 3.2% for base and 7 4.8% for 2021.	

Action		Measure description	Responsibility	Cost *Very Low=≤£10K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	**ID**							
Cleaner transport: Policy	**25.1**	Update of Cycling Strategy and policies for the borough.	Transport	££	1–2	(ST):	The strategy was developed in 2016/17 and published in 2018. An update will be undertaken by end 2022. The updated cycling strategy will include updated KPIs.	New Cycling Strategy to include a reference to LTN1/20 and other guidelines and standards as appropriate.
Cleaner transport:	**25.2**	Increasing cycle parking on street and in new	Planning/ Transport	£££-££££	1–2	(ST) Ongoing.	194 Sheffield stands installed in 2021 at	We currently have **121** bike hangars in the borough.

Action		Measure description	Responsibility	Cost *Very Low=≤£10 K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	**ID**							
Infrastructure		developments in line with London Plan Standards.		Additional external funding will be needed.		Already being provided but will be increased year on year.	key train stations and town centres. Internal reporting and LiP yearly reporting on increase in parking/bike hangars installed across the borough, with at least one hangar in every ward. **KIPs include:**	There is a commitment in the AQAP to install at least one hangar per ward every year. A total of 50 new cycle hangars are to be installed in the near future (i.e. 2022/23). Cargo cycle parking should be researched further

Action		Measure description	Responsibility	Cost *Very Low=≤£10K(£) Low = £10-£50K (££); Medium = £50K - 500K (£££); High <500k (££££)*	Expected emissions/ concentrations benefit *[Magnitude of air quality benefits: Low (0-1), Medium (2) and High (3)]*	Timescale for implementation *[Short term=0-2 years (ST); Medium term= 2-5 years (MT); Long-term= 6+ years (LT)]*	Outputs/Targets/Key Performance Indicators (KPIs)	Further information
Category	**ID**							
							Provide statistics on the number of cycling parking/stands across the borough.	but not required in the AQAP.

Appendix A: Response to Consultation

Schedule 11 of the Environment Act 1995 requires the Council to consider any representations made in accordance with the consultation. Therefore, public consultation was carried out between **1 September and 28 September 2021**, **then extended to Wednesday 6 October 2021**. A communication/engagement/consultation plan has been appended to this draft report.

Three main groups **will be** consulted during the development/ review of the Air Quality Action Plan.

These comprise of: -

- Internal stakeholders who will deliver the actions detailed in the plan.
- Statutory consultees as required by the legislation and
- The external stakeholders due to significant public interest in health issues and local air quality.

a) **Internal Stakeholders:** The consultation of each relevant service area **will be** carried out before and during the development of the plan. This included the following service areas:

- Environmental Health
- Environmental Protection
- Crime Enforcement Regulation (CER)
- Fleet (S.G.M Environment)
- Housing Private Sector (Environmental Health Residential) and Private Sector Housing (Grants)
- Parking
- IT
- Planning and Development Management
- Parks & Regeneration
- Strategic Procurement and Commercial Services
- Public Health
- Sustainable Resources/Climate Resilience
- Transport (including Smart travel, Parking Services Finance, Sustainable Transport – Operations, Sustainable Transport - Major Schemes Projects & Transport Planning)
- Others (including Corporate Resources, Strategy & Communications and Enforcement Response)

Comments and queries made by each service have been addressed prior to external consultation. All staff working for the Council are being further consulted during the public consultation.

b) **Statutory consultees as required by legislation:** It is a legal duty under Environment Act 1995 and the London Local Air Quality Management Framework to consult specific parties and agencies during the development of any air quality strategies and action plans. The following parties are being contacted directly by email as planned.

- Residents
- Local MPs and Members
- Secretary of State
- Environment Agency
- Transport for London
- All neighbouring local authorities, the South London Cluster Group
- Bodies representing local business interests and other organisations such as South London Chamber of Commerce and Enterprise
- The Greater London Authority (GLA) is being consulted during the review and consultation stages. Following the consultation exercise, the final draft plan will be agreed with the GLA and the resulting Consultation Report appended to this plan.

Table A.1 Summary of Responses to Consultation and Stakeholder Engagement on the AQAP

A consultation responses report is attached to this action plan.

Consultee	**Category**	**Response**
Climate Action Lewisham	Statutory	Refer to the consultation report
Environment Agency (EA)	Statutory	Refer to the consultation report
Catford Active Travel	Statutory	Refer to the consultation report
Public Health England (PHE)	Statutory	Refer to the consultation report
Lewisham Cyclists	Statutory	Refer to the consultation report

Natural England	Statutory	Refer to the consultation report
Paper documents	Public consultation	Refer to the consultation report
Resident 1	Public consultation	Refer to the consultation report
Responses to public consultation are appended to the plan	Public consultation	(Refer to Appendix B of the Consultation response report)

What we heard

A combination of interlinked and complementary measures are key to creating positive short term and long term impacts on air quality and carbon reduction in Lewisham.

Using the following list of topics proposed by the GLA in its template matrix to reduce air pollution in London, the findings of the survey were as follows:

- **Monitoring and other core statutory duties**: Several respondents reiterated the need for the Council to increase air quality monitors around sensitive receptors including schools, nurseries, care homes, hospitals, around major roads and in areas with high levels of deprivation; and for the council to adopt the new WHO guidelines[97] published in September 2021. Increased public information about the human health risks from air pollution was also mentioned in several responses.

- **Emissions from developments and buildings:** It was suggested that the Council use planning tools to encourage sustainable development and impose air quality mitigations measures for all developments (e.g. reduce indoor pollution by adopting and providing incentives to replace combustion plants like old boilers to low emission alternatives; reducing emission from construction activities, non-road mobile machinery(NRMM), reducing indoor pollution, installing more electric charging points and green infrastructure in new developments) and air source heat pump installation in housing estates.

- **Delivery servicing and freight:** There was feedback that the Council should work with partners to reduce emissions from vehicles delivering goods and services, including light and heavy-duty diesel-fuelled vehicles with high primary NO_2 emissions.

[97] https://www.who.int/news/item/22-09-2021-new-who-global-air-quality-guidelines-aim-to-save-millions-of-lives-from-air-pollution

- **Borough fleet actions:** The Council should lead by example by tackling its own fleet (i.e. replacing with low emission alternatives), and taking all the necessary actions to reduce other sources of air emissions and its carbon footprint.

- **Localised solutions:** There were several responses about the Low Traffic Neighbourhood (LTN) that will be included in the considerations for the specific consultation into the LTN conducted earlier this year. It was suggested that Lewisham Council should work with all relevant authorities to resolve traffic issues on major strategic roads such as the south circular which will lead to reducing congestion, vehicle idling and air pollution. A couple of respondents suggested that the expansion of the LTN would be positive because it would help to improve air quality and enable the Council to commit to radical actions which actively discourage car ownership. The changes suggested include fewer parking spaces, more LTN's, and expanding ULEZ to the entire Borough.

- **Cleaner transport:** Road transport is the main source of air pollution in London, therefore, this was the topic that generated the most feedback during the consultation. Suggestions include increasing and promoting active travel, reducing and discouraging car usage, improving road safety and increasing walking and cycling infrastructure, promotion of low emission vehicles, combusting plant and infrastructure. Our school street programme was appreciated and further pedestrianisation was suggested to encourage active travel. Again, addressing the traffic impacts of the LTN and traffic on the south circular were the predominant suggestions. There were some negative comments about the ULEZ expansion, and some positive comments stating that the scheme should be enforced to ensure that no non- ULEZ compliant buses or taxis drive in the Borough.

- **Other important feedback from the consultation include:**

    - Replace old boilers(s) with ultra-low emission boilers and use of bicycles for local journeys or taking the bus regularly scored the highest on the lifestyle or behaviour changes that the residents would like to adopt to reduce air pollution. (Most respondents stated that they were already taking most of the actions listed in the survey).

    - Carry out energy audits, designing in-house travel plans for staff in addition to encouraging staff to use public transport where possible, were the highest ranking lifestyle or behaviour changes that businesses and other organisations would like to adopt to improve air quality.

    - Increase green infrastructure and stop the removal of green infrastructure around sensitive receptors and major roads.

- Reduce pollution in and around schools by extending school audits to other schools in polluted areas, and improving walking and cycling infrastructure were some of the highest ranking suggestions included on the Council`s priority list of actions.

- Improve Lewisham's waste management procedures, street cleansing and other services.

- **Demographics of the survey:**

  - **Age:** The majority (17.43%) of respondents were between 45-49 years of age. People aged 18-24 and 75-79 represented the age groups with the lowest (8.3% for each) proportion of responses. 6.22% of respondents provided no answer to the age question and 5.39% did not to state their age. The residual percentage was distributed among other categories.
  - **Ethnicity:** 7.14%% provided no answer and 7.14% preferred not to state their ethnicity. Of those that did, the majority of respondents (71 %) were white with the rest distributed across other ethnic groups.
  - **Gender:** There were slightly more male (44.96%) than female (43.70%) respondents. Some did not answer or preferred not to state their gender;
  - **Disability:** 7.14% were disabled (disabilities distributed across all categories), 9.24% provided no answer, 6.30% preferred not to say, the majority of respondents did not identify as disabled. Easy read, step-free access, accessible toilets, wheelchair access were among suggestions given to improve accessibility of the consultation.
  - **Religion:** The majority (48.55%) did not state a religious preference, 9.54% preferred not to say anything about their religion and 17.43% provided no answer. Of those that did respond 19.09% were Christians, the remainder were distributed among other religions.
  - **Sexuality:** The majority (62.24%) of respondents identified as heterosexual, the remainder of respondents was distributed among other categories. 11.62% preferred not to say their sexuality and 16.60% who provided no answer.
  - **Gender Identity:** The majority (67.22%) of respondents identified with the same gender as the one that they had at birth. The remainder were distributed among other categories with 10.79% preferring not to say their gender at birth, 21.16% provided no answer. 0.83% had different a gender identity from the one that they had at birth.

- **Areas:** The majority of respondents (14.11%) live in Lee Green, and 12.45% live in Lewisham Central. The remainder were distributed among other locations with 2.49% not living in Lewisham. 12.45% provided no answer.

  Conclusions: The age distribution of the respondents corroborate with the most active group of the population or those most able to use the internet to respond to the consultation. The distribution of the ethnicity is in line with most consultation surveys and suggests the need for the Council to engage with other groups of the population. The results may also be attributed to cultural differences or social and economic inequalities, with the people from Black and Minority Ethnic (BME) backgrounds (which are more impacted by air quality in accordance with recent research), more likely to be interested in meeting their financial and socio-cultural needs than taking part in surveys with others potentially not having English as a first language. The findings related to disability raised the issue of resources needed to better meet the needs of this group. Most respondents were from the Lee Green and Lewisham Central areas, which is representative of the populations most affected by the LTN. The general negative perception of the LTN by this group may have impacted the results of the survey.

What we have done with your suggestions

We have considered all the comments made and modified this plan as appropriate.

The adopted AQAP will be subject to annual review, appraisal of progress and reporting to Lewisham Health Protection Committee and Lewisham Strategic Air Quality Board.

Progress each year will be reported in the Annual Status Reports, as part of our statutory London Local Air Quality Management duties.

Appendix B Reasons for Not Pursuing Action Plan Measures

Table B.1 Action Plan Measures Not Pursued and the Reasons for that Decision

Action category	Action description	Reason action is not being pursued (including Stakeholder views)
Localised solutions	Introduction of Low Emission Neighbourhoods	We have been unable to obtain funding for this measure.
Implement a Zonal Construction Logistics Plan	We will control emissions from new developments, through Planning and enforcement, including construction (sites and traffic). Lewisham will, through a Mayor's Air Quality Funded (MAQF) project, produce and implement a Zonal Construction Logistics Plan for the developments taking place in the area around the Evelyn Street corridor. This is a GLA focus area) and an Opportunity Area within the London Plan.	This project was discontinued because of TfL funding cuts due to Covid-19. This project will resume when funding become available.
"Borough fleet actions"	"Join the Fleet Operator Recognition Scheme (FORS) for the borough's own fleet and obtain Gold accreditation"	This Action has been discontinued.

Appendix C Links between Air Pollution and Other important LBL Strategies

New 2021 World Health Organization (WHO) Guideline

Public Health England exists to protect and improve the nation's health and wellbeing, and reduce health inequalities

New WHO Global Air Quality Guidelines (AQGs)[98] published in September 2021 provide clear evidence of the damage air pollution inflicts on human health, at even lower concentrations than previously understood. The guidelines recommend tighter air quality levels to protect the health of populations, by reducing levels of key air pollutants, some of which also contribute to climate change.

Whilst not legally-binding, like all WHO guidelines, AQGs are an evidence-informed tool for policy-makers to guide legislation and policies, in order to reduce levels of air pollutants and decrease the burden of disease that results from exposure to air pollution worldwide. Conscious that this will be a difficult task for many countries and regions struggling with high air pollution levels, WHO has proposed interim targets (IT) to facilitate stepwise improvement in air quality and thus gradual, but meaningful, health benefits for the population.

NO_2 concentrations versus (vs) WHO Air Quality Guidelines and Interim Targets (ITs)

The concentrations of NO_2 recorded in Lewisham are all above the new AQG of 10 µg m^{-3} but still below the first interim target (IT) of 40 µg m^{-3}. The overall average concentrations have been below the first interim target since 2018.

The urban background monitoring site LW1 has also not seen an exceedance of the hourly AQO value of 200 µg m^{-3} since pre-2014. The WHO AQG remain 200 µg m^{-3}.

Considering that the overall background concentration of NO_2 is more than 10µg m^{-3}, it would be a challenge to try to achieve the recommended guideline by 2030 as shown in in Figure 16.

[98] https://www.who.int/news/item/22-09-2021-new-who-global-air-quality-guidelines-aim-to-save-millions-of-lives-from-air-pollution

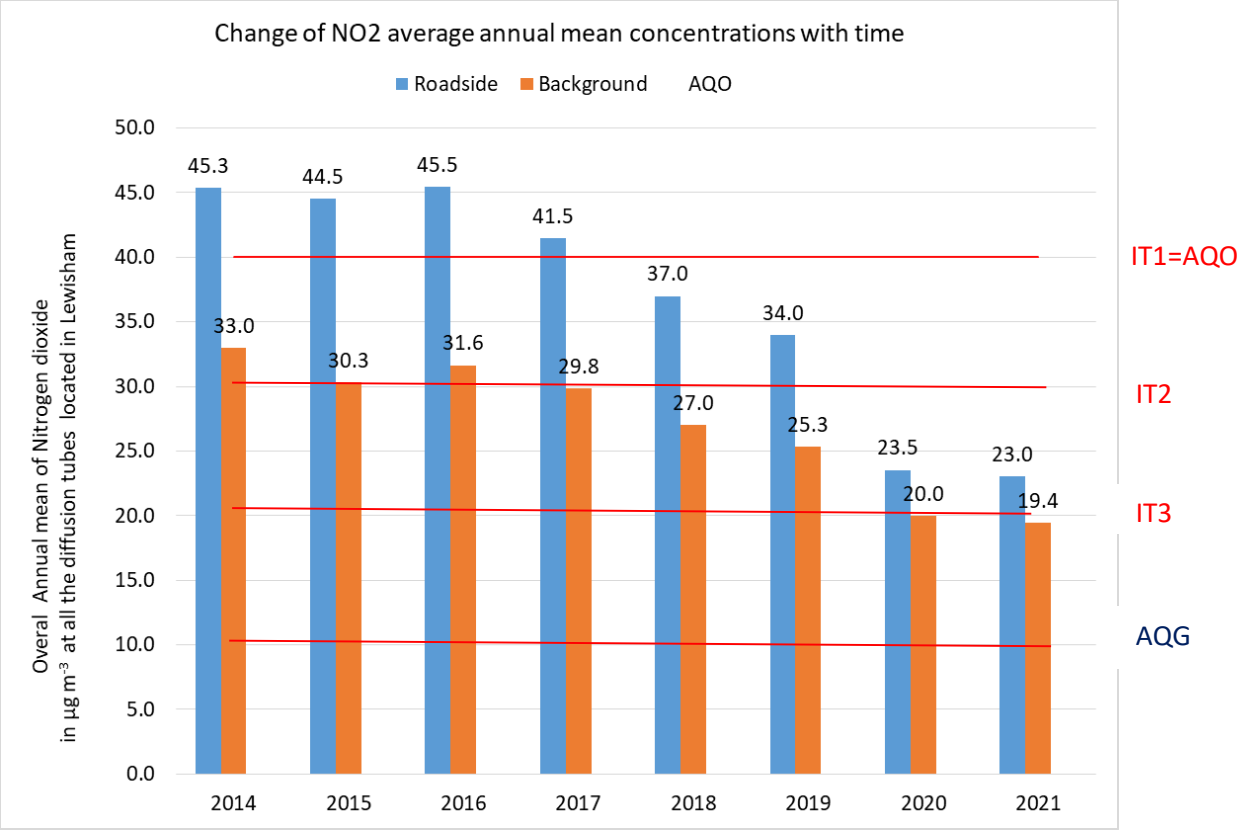


Figure 16 Trend of overall NO_2 annual mean concentrations with time vs WHO interim targets/AQG

Note: The horizontal lines denote World Health Organization (WHO) interim target (IT) 1, 2 and 3 then the Air Quality Guidelines (AQGs) of 40, 30, 20 and 10 µg m^{-3} respectively. The IT is currently equal to the current AQS.

PM_{10} Concentrations versus WHO Air Quality Guidelines and Interim Targets

Figure 17 presents a comparison of the Annual Mean PM_{10} Automatic Monitoring Results (µg m^{-3}) with the new WHO guidelines. The concentrations of PM_{10} were all above the new AQG of 15 µg m^{-3} but still below the first, second and third interim targets (IT) of 70 µg m^{-3}, 50 µg m^{-3} and 30 µg m^{-3} respectively since 2014. All concentrations have been below the third IT value of 30 µg m^{-3} in 2021.

LBL will work towards achieving the AQG by 2027 at the latest.

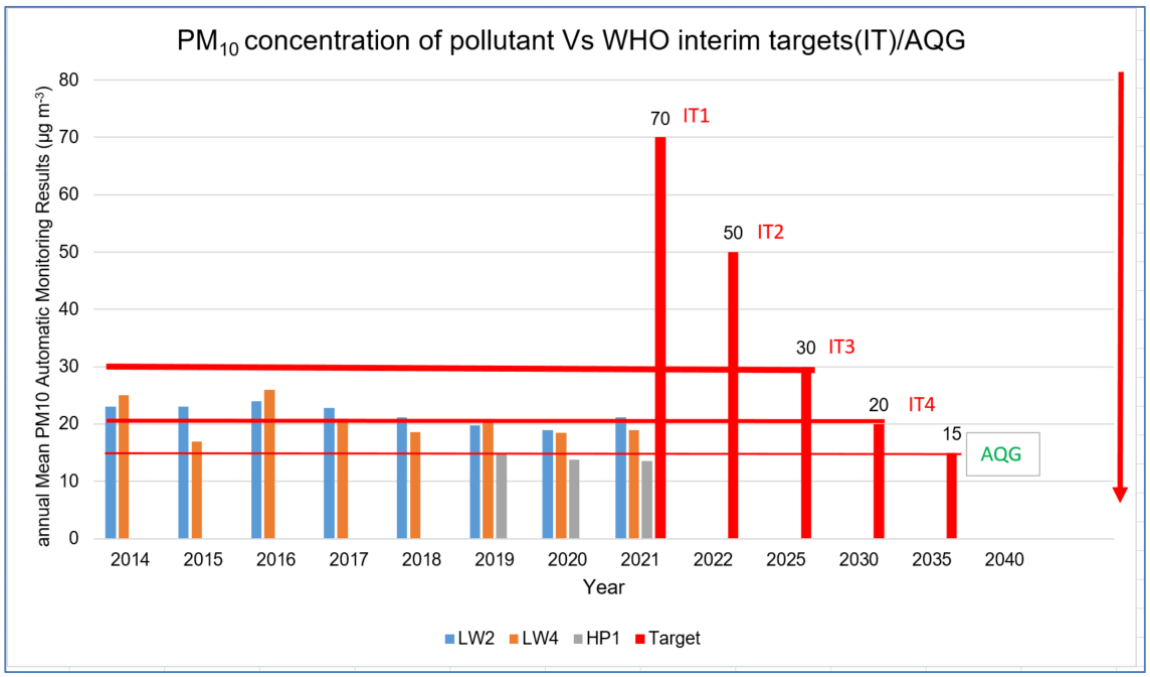


Figure 17 PM_{10} Concentration vs WHO interim targets/AQG

Notes: The annual mean concentrations are presented as µg m^{-3}.All means have been "annualised" in accordance with LLAQM Technical Guidance, if valid data capture is less than 75% and more than 33%.

The PM_{10} Automatic Monitoring Results: Comparison with 24-Hour Mean Objective, Number of PM_{10} 24-Hour Means > 50 µg m^{-3} are as follows.

Table C.1 The PM_{10} Automatic Monitoring Results: Comparison with 24-Hour Mean Objective, Number of PM_{10} 24-Hour Means > 50 µg m^{-3}

Site ID	2014	2015	2016	2017	2018	2019	2020	2021	Interim targets (IT)				AQG
									1	2	3	4	
LW2	14 (38)	8	9	11	4	9	5 (30)	2 (71)	150	100	75	50	45
LW4	13 (**41**)	1	18 (**47**)	7	1	9	8	3					

HP1	-	-	-	-	-	7	4	0					

Notes the Interim targets (IT) are for 99th percentile, (i.e. 3-4 exceedances per year).

Exceedances of the PM_{10} 24-hour mean objective (50 µg m^{-3} over the permitted 35 days per year) are shown in **bold.**

Where the period of valid data is less than 85% of a full year, the 90.4th percentile is provided in brackets.

(a) data capture for the monitoring period, in cases where monitoring was only carried out for part of the year

(b) data capture for the full calendar year (e.g. if monitoring was carried out for six months the maximum data capture for the full calendar year would be 50%).

In 2021, LW4 saw 3instances where the 24-hour mean was greater than the AQO value of 50 µg m^{-3} (i.e. the IT target 4), whereas HP1 saw 0 instances during the year and LW2, 2 instances. However, these are well below the 35 permitted (the IT allow 3-4 exceedance days per year), meaning all monitoring stations achieved compliance with the 24-hour mean AQO/IT target 4. There has been a decrease in the number of 24-hour means greater than the AQO threshold value in comparison to 2019 and 2020 at all sites.

$PM_{2.5}$ Concentrations versus WHO Air Quality Guidelines and Interim Targets

Figure 18 is a comparison of the Annual Mean $PM_{2.5}$ Automatic Monitoring Results (µg m^{-3}) with the new WHO guidelines. The concentrations are all below the interim targets 1 and 2 but however above the new 2021 AQG of 5 µg m^{-3}., which are lower than the previous guideline of 10 µg m^{-3}. Exceedance of the IT of 10 µg m^{-3} has occurred since 2014 to 2021 at LW2. All concentrations recorded at LW5 and HP1 have been below the interim target 4 of 10 µg m^{-3}.

LBL will work towards achieving the IT by 2030 at the latest as shown in Figure 18.

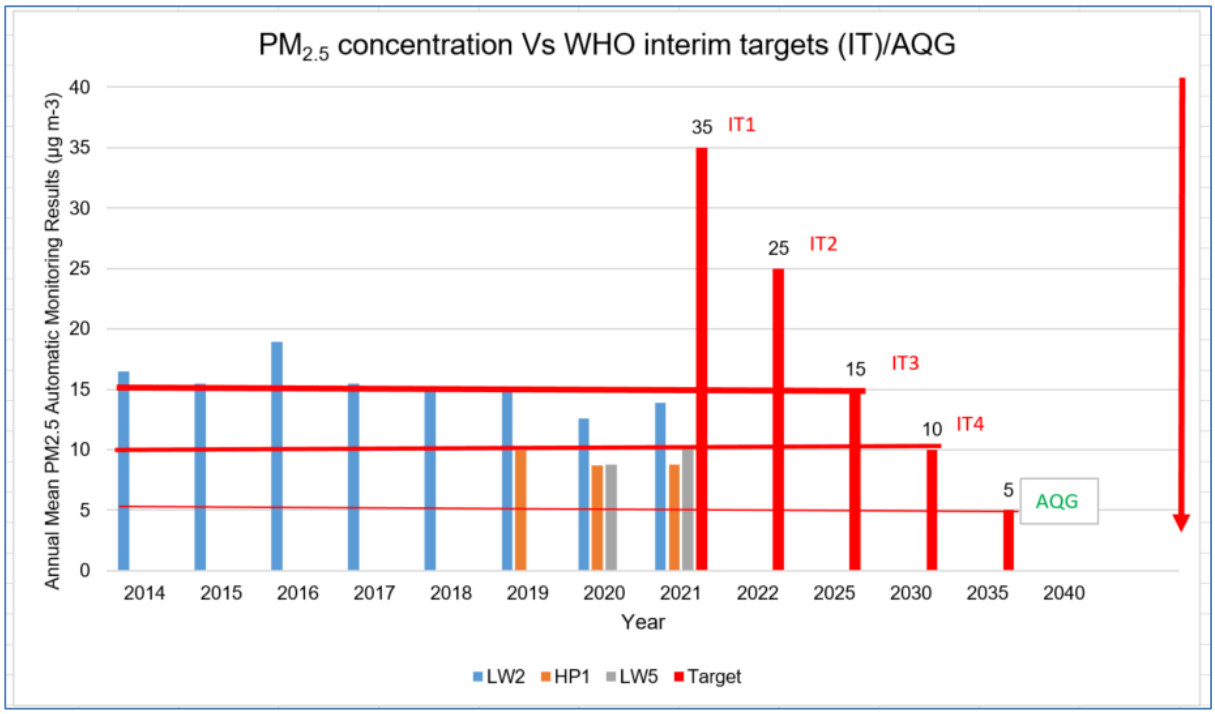


Figure 18 $PM_{2.5}$ **C**oncentrations vs WHO interim targets/AQG

Notes

The annual mean concentrations are presented as µg m^{-3}. All means have been "annualised" in accordance with LLAQM Technical Guidance, if valid data capture is less than 75% and more than 25%.

Air Quality Policy Context

An overview of the relevant policy drivers for air quality work include European Legislation through the Ambient Air Quality Directive 2008/50/EC and the Fourth Daughter Directive 2004/107/EC, National Legislation -The Air Quality Strategy for England, Scotland, Wales and Northern Ireland, the framework for Local Air Quality Management (LAQM) in the UK, the National Planning Policy Framework (NPPF), the Clean Act Strategy and the Environment Act 2021, the London Plan 2021 and the Local Plan Policy.

In compiling an air quality action plan, it is important to consider other relevant international, regional, and local policies because pollution is transboundary, that depend on many anthropogenic and environmental factors therefore only an integrate approach can help deal with the problem and reduce exposure. Some of the local strategies are presented as follows.

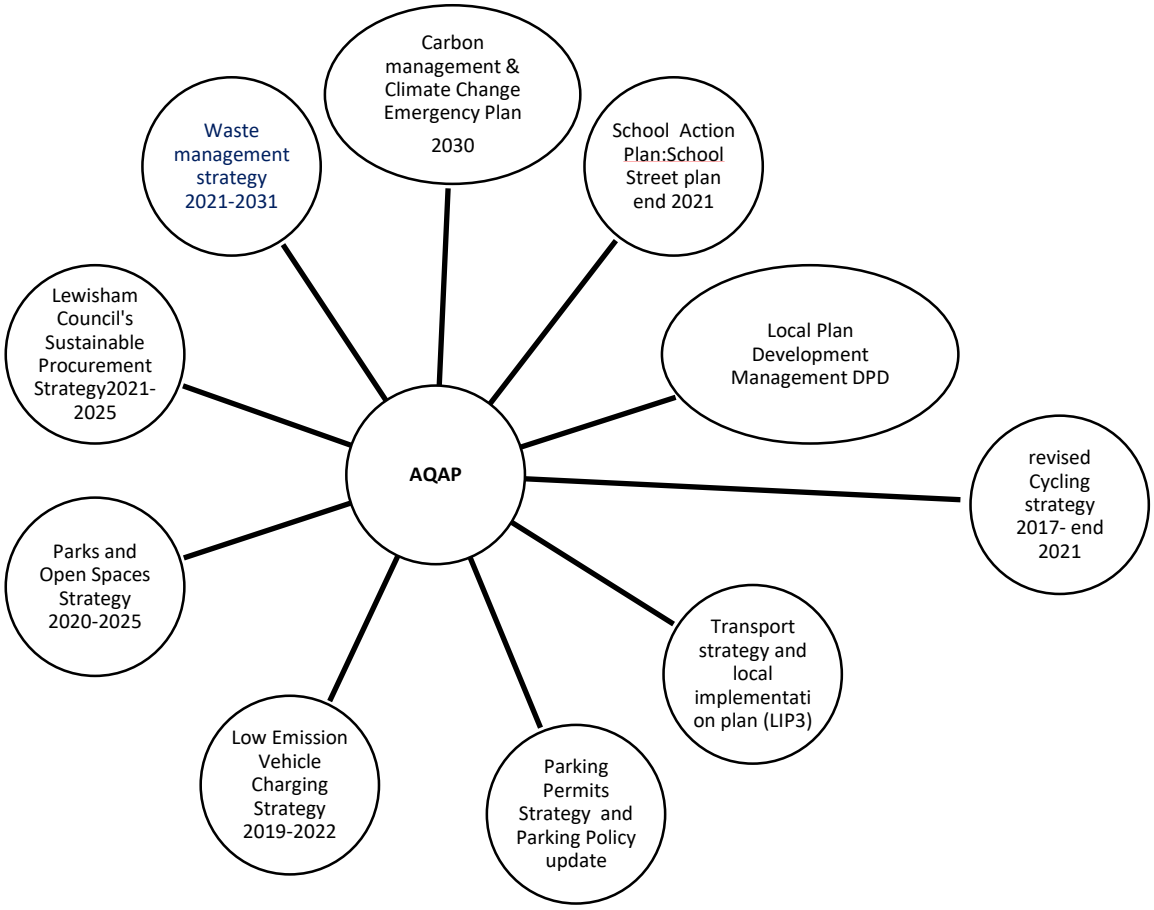
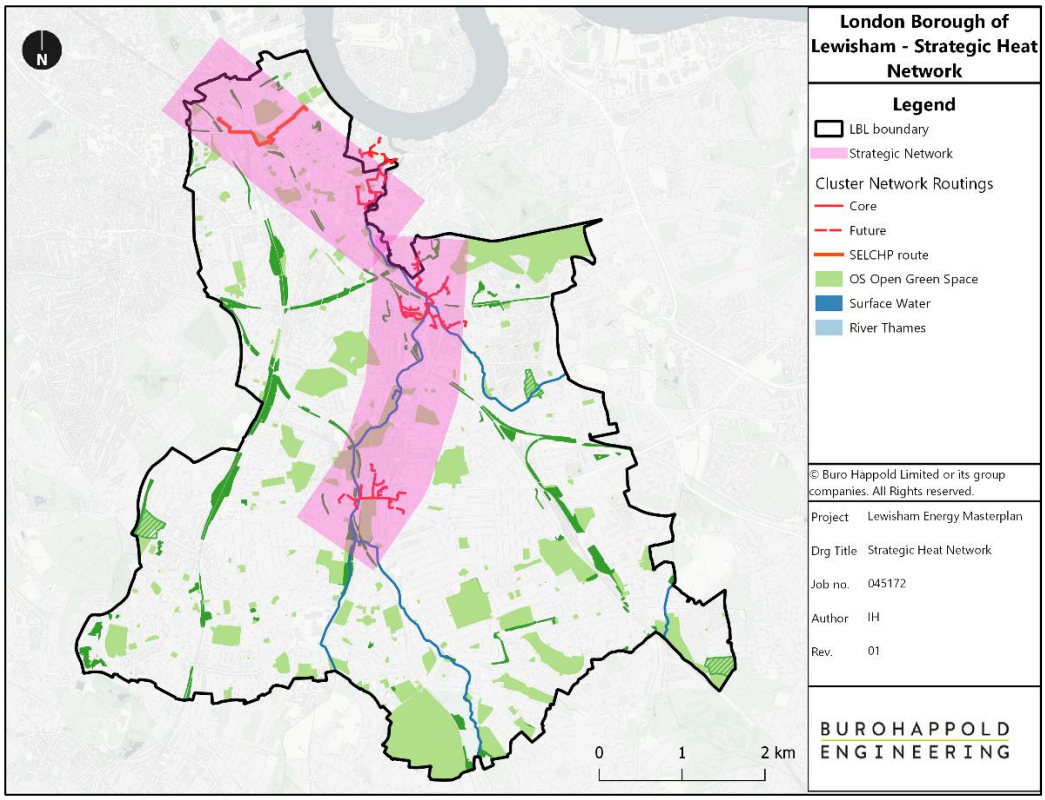


Figure 19. Some local strategies linked to this AQAP

- **Air Pollution and Carbon management/ Strategic heat network**

National measures to cut air pollution would benefit from stronger links with climate action, according to the European Environment Agency (EEA). Promoting consistency in reporting policies and measures on air pollution, energy and climate change can reduce red tape, foster policy coherence and support the identification of synergies across efforts towards zero pollution and climate neutrality nationally and locally. Further information on our point approach is set out above in the summary to this document.

The maps below highlight the potential geographical synergies between the GLA air quality focus areas 126, 127 and 131 with the proposed focal point for heat networks identified in recent Energy Master Planning work by the Council. Progress in decentralising energy systems and converting them to clean zero carbon energy sources would be expected to deliver carbon and air quality benefits.



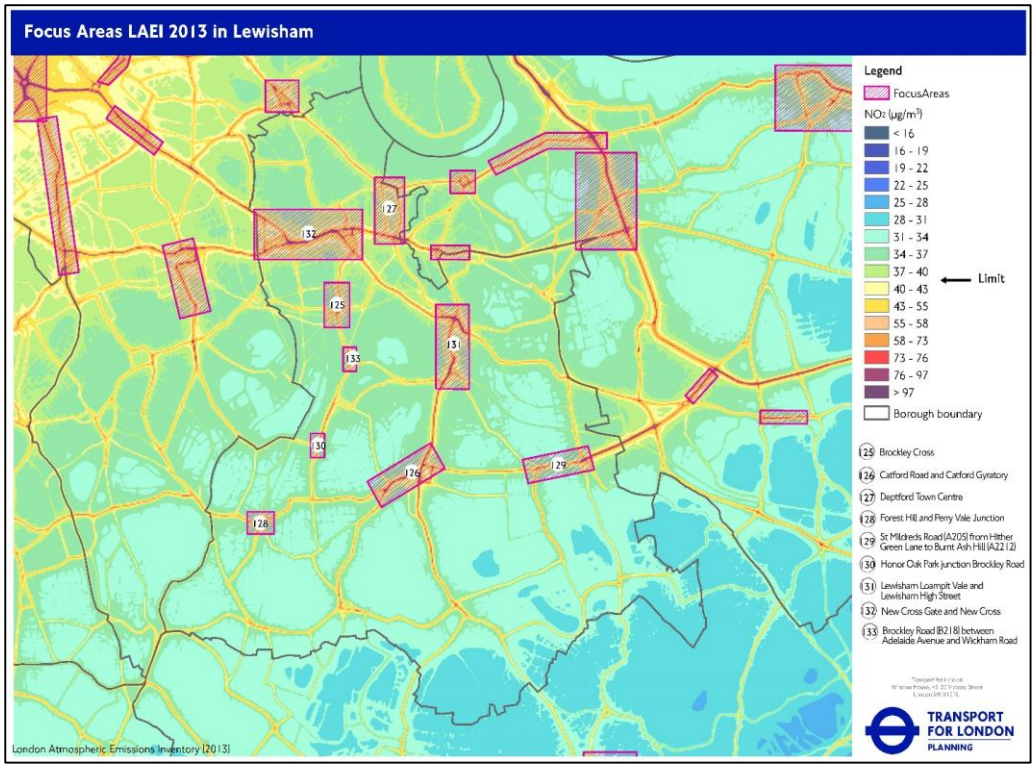
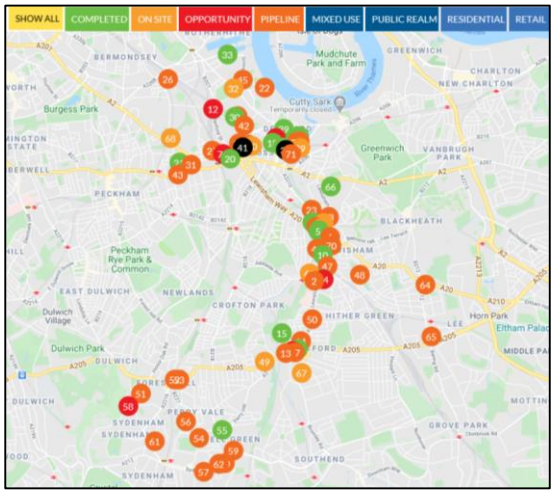


Figure 20 Relationship between air quality focus areas and strategic heat network in Lewisham

- **Air Pollution and Lewisham local development framework**

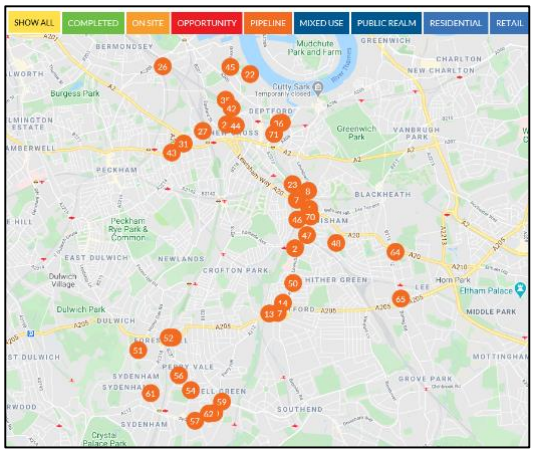
It is important to include policies relating to the strategic planning framework at every level (Regional Spatial Strategy and Local Development Framework). The presence of a suitable air quality policy can be particularly useful where a refusal of planning permission leads to an appeal and subsequent public inquiry. The Lewisham Development Management Local Plan (DMLP) sets out the Council's planning policies for managing development in LBL and will be used to guide, assess, and determine planning applications. The plan supports the implementation of the Lewisham Core Strategy and the London Plan and should be read alongside the Site Allocations Local Plan, the Lewisham Town Centre Local Plan, and any Council Supplementary Planning Documents (SPDs).

Lewisham will be one of the fastest growing parts of the London economy by 2027[99]. The following extracts from an online Interactive Development Map show that Lewisham, Bakerloo Line, Catford and New Cross Gate / Deptford are area planned for development that need be taken into consideration in the coming years.



N	Description	Site
3	Lewisham Gateway Phase 2	Ongoing
9	Former Carpet right, Loampit Vale	
32	Deptford Timberyard	
40	Amersham Vale	
63	Church Grove	
68	1 White Post Street	
67	Phobes Garden Centre	
12	164-196 Trundleys Road	Opportunity
37	Catford Town Centre	
38	Deptford and New Cross	
58	Mais House	
72	Land at Goodwood Road	
73	Tesco Store, Conington Road	
74	PLACE/Ladywell redevelopment	

[99] *See more https://lewishamlondon.co.uk/interactive-development-map/ [Accessed 28/01/2021).*



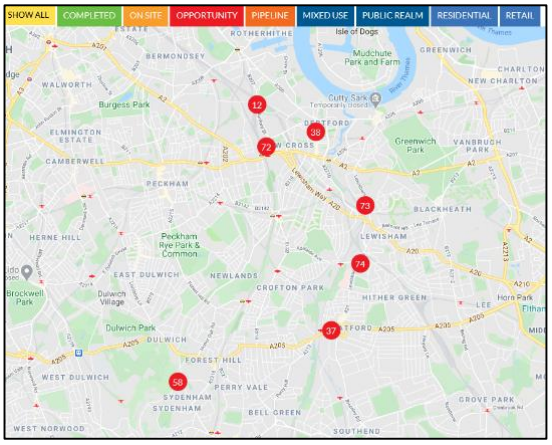


Figure 21 Relationship between air quality policies and Lewisham local development framework

Appendix D Summary of Current National Air Quality Standards/ Objectives and WHO air quality guidelines

The following table represents a summary of WHO air quality guidelines prior to September 2021.

Table D.1 WHO air quality guidelines prior to September 2021

Pollutant	Objective (UK)	Averaging Period	Date[100]
Nitrogen dioxide - NO_2	200 □g m^{-3} not to be exceeded more than 18 times a year	1-hour mean	31 Dec 2005
	40 □g m^{-3}	Annual mean	31 Dec 2005
Particles - PM_{10}	50 □g m^{-3} not to be exceeded more than 35 times a year	24-hour mean	31 Dec 2004
	40 □g m^{-3}	Annual mean	31 Dec 2004
Particles - PM10 WHO Air quality guideline values	20 □g m^{-3}annual mean	Annual mean	**2030**
	50 □g m^{-3}	24-hour mean	**2030**

[100] *by which to be achieved by and maintained thereafter*

Pollutant	Objective (UK)	Averaging Period	Date[100]
Particles - $PM_{2.5}$	25 □g m^{-3}	Annual mean	2020
	Target of 15% reduction in concentration at urban background locations	3 year mean	Between 2010 and 2020
Particles - $PM_{2.5}$ WHO Air quality guideline values	10 □g m^{-3}	Annual mean	**2030**
	25 □g m^{-3}	24-hour mean	**2030**
Sulphur Dioxide (SO_2)	266 µg m^{-3} not to be exceeded more than 35 times a year	15-minute mean	31 Dec 2005
	350 µg m^{-3} not to be exceeded more than 24 times a year	1 hour mean	31 Dec 2004
	125 µg m^{-3} mot to be exceeded more than 3 times a year	24-hour mean	31 Dec 2004

The WHO 2021 air quality guidelines provide interim targets for concentrations for the main pollutant which aimed at promoting a gradual shift from high to lower concentrations[101]. The reader should refer to the full document for further details.

Table D.2 Current WHO air quality guidelines published in 2021

Pollutant **In** µg m^{-3}	**Averaging time for pollutants/Definition**	**Summary of WHO (2021) recommended Pollutants AQG levels and interim targets (IT)** µg m^{-3}				**AQG level/Target** µg m^{-3}
		IT1	**IT2**	**IT3**	**IT4**	
$PM_{2.5}$	Annual	35	25	15	10	**5**
	24-hour	75	50	37.5	25	**15**
PM_{10}	Annual	70	50	30	20	**15**
	24-hour	150	100	75	50	**45**
O_3	Peak season	100	70	na	na	**60**
	8-hour	160	12	na	na	**100**
NO_2	Annual	40	30	20	na	**10**
	24-hour	120	50	na	na	**25**

[101] https://www.who.int/news/item/22-09-2021-new-who-global-air-quality-guidelines-aim-to-save-millions-of-lives-from-air-pollution

Pollutant **In** µg m^{-3}	**Averaging time for pollutants/Definition**	**Summary of WHO (2021) recommended Pollutants AQG levels and interim targets (IT)** µg m^{-3}				**AQG level/Target** µg m^{-3}
		IT1	**IT2**	**IT3**	**IT4**	
	1-hour	NC	NC	NC	NC	**200**
SO_2	24-hour	125	50	na	na	**40**
	10- minute	NC	NC	NC	NC	**500**
CO	24-hour	7	na	na	na	**4**
	8-hour	NC	NC	NC	NC	**10**
	1-hour	NC	NC	NC	NC	**35**
	15-minute	NC	NC	NC	NC	**100**

Note: Extract WHO global air quality guidelines: particulate matter ($PM_{2.5}$ and PM_{10}) , ozone, nitrogen dioxide, sulphur dioxide and carbon monoxide (World Health Organisation, 2021).