



Air Quality Action Plan

2020 to 2025



Bromley is the greenest and least polluted of all London Boroughs

AQAP



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Foreword

I am pleased to endorse Bromley's Air Quality Action Plan for 2020 to 2025, or AQAP for short.

Bromley is the largest borough geographically and the 6th largest by population in London, with 327,500 residents who call Bromley their home.

We are proud to be the greenest and the least polluted of all London boroughs, with:



7,000

acres of green space



100,000+

plotted trees



560

hectares of woodland

Having said this, we recognise that the good work already undertaken must be built upon, to ensure we maintain and improve our air quality for our residents.

With that in mind, this action plan highlights existing measures as well as new initiatives; both of which demonstrate the Borough's commitment to tackling poor air quality. The measures presented further contribute to the 'clean and safe borough' ambition within our Borough plan and is one of the priorities within Bromley's Transformation Agenda, that of a quality environment and healthy Bromley.

This plan demonstrates the intended actions against the 25 measures stipulated in the latest Greater London Authority (GLA) 2019 matrix, which are proportionate within the local context.

It gives clear actions and anticipated targets for delivery and demonstrates the joined up and holistic approach we will take. However, the arena surrounding air quality is moving at a fast pace, as such, the actions we take as a borough will not necessarily be restricted to those listed in the matrix. We will scan the horizon for opportunities that present themselves resultant of new technology, advancements in research or new funding streams, and we will consider how these can be applied for the benefit of Bromley residents as they arise.

Within this plan, Bromley recognises the need to work with external partners and stakeholders collaboratively, to reduce pollution in the areas of the Borough where levels exceed the national air quality objectives. This is important, as the main contributing factors that affect us locally, such as pollution from our strategic and major road networks, are not directly within our control. Finally, whilst modelling data shows we meet the national objectives for Fine Particulate Matter (PM), we intend on using the measures within this plan to reduce the levels from this pollutant further, with the aim of meeting enhanced World Health Organisation (WHO) target in the future at the time of the adoption of this strategy.



Councillor William Huntington-Thresher

Portfolio Holder
Environment and Community Services

Responsibilities and commitment

This Air Quality Action Plan (AQAP) has been produced as part of our statutory duties as we have declared an Air Quality Management Area in Bromley, as required by the Greater London Authority (GLA) under the London Local Air Quality Management (LLAQM) statutory process.

This Plan contains all the actions we will take to improve air quality in Bromley between 2020 and 2025.

In accordance with the LLAQM, progress against the plan will be detailed in Annual Status Reports and available to download from the Council's website.

This document has been formulated by the Environmental Protection Team at the Council with the support and agreement of the following officers and departments:

- Ade Adetosoye OBE, Chief Executive
- Dr Nada Lemic, Director of Public Health
- Colin Brand, Director of Environment and Public Protection
- Joanne Stowell, Assistant Director of Public Protection
- Peter McCready, Assistant Director of Environment
- Angus Culverwell, Assistant Director of Traffic and Parking
- Gillian Fiumicelli, Head of Vascular Disease Prevention Programme
- Sarah Foster, Assistant Director of Performance Environment and Public Protection
- Jake Hamilton, Head of Development and Planning
- Charlotte Hennessy, Environmental Protection and PRS Housing Manager
- Paul Chilton, Transport Operations Manager
- Hugh Chapman, Arboriculture Manager
- Amy Harris, Waste Strategy Manager
- Lee Gullick, Carbon Programme Manager
- George Brown, Environmental Programme Officer
- Rachel Sadler, Environmental Protection Officer
- Katie Ryde, Planning Strategy

Summary

This Air Quality Action Plan (AQAP) has been produced as part of the Council's duty to London Local Air Quality Management. It outlines the action we will take to improve air quality in the London Borough of Bromley from 2020 to 2025, and replaces the previous action plan which ran from 2010 to 2020.

Whilst certain modelled data shows that Bromley may be the greenest and least polluted of all London Boroughs, we know that poor air quality 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. Additionally, air pollution particularly affects the most vulnerable in society: children and older people, and those with heart and lung conditions.

The annual health costs to society of the impacts of air pollution in the UK are estimated to be roughly £15 billion, and the London Borough of Bromley is committed to reducing the exposure of people in Bromley to poor air quality in order to improve health.

This AQAP has been split into 2 sections.

The first provides the background for Bromley's actions on air pollution, including general explanations of what air pollution is and the associated health effects.

This section also summarises the AQMA and AQFAs, as well as the key pollutants of concern for Bromley.

It provides the overall picture for London and takes a closer look at pollution in Bromley: where pollution is, where it comes from, and the trends in pollution levels across the borough over time.

The second section of this draft AQAP is the action plan itself; it presents the themes as required by the GLA. However, whilst the GLA has 7 themes, we have condensed these down to 5, as the 3 categories that relate to transport have been grouped together.

The 5 themes are:



Monitoring air quality



Reducing emissions from buildings and new development



Public health and raising awareness



Reducing emissions from transport (including servicing freight and fleet)



Local solutions

The GLA within their matrix presented 25 action points under the above themed headings, and we aim to deliver proportionate actions against all points to meet our statutory requirements. Working in partnership, we have presented additional actions beyond the initial 25 points and are committed to reduce levels of all pollutants as far as is practicable within the local context.

This is important point to make, as Air Quality is something we cannot tackle alone. Pollution travels across borough, national and international boundaries, and many of the factors contributing to pollution in Bromley may be beyond our control (e.g. transboundary pollution).

Moreover, the main areas in our borough that experience exceedances are along our busy 'A' roads, the majority of which are the responsibility of Transport for London (TfL). This being the case, we will continue to work with and lobby regional and central government on policies and issues beyond Bromley's control, whilst tackling action in those areas within our sphere of influence.

What is air pollution?

Air pollution is a combination of solid particles and noxious gases that are emitted into the atmosphere. Some of these emissions occur naturally, and some as a result of human activity, but both can have a negative effect on human health. Human derived pollution is mostly associated with the combustion of fossil fuels such as coal, oil, petrol or diesel. Examples of natural pollution include the smoke resultant of forest fires and the production of methane from animals.

The main pollutants

The main pollutants of concern are Carbon Monoxide, Nitrogen Dioxide, ground level Ozone, and particulate matter (small dust particles made up of a variety of different chemicals).

What is the most harmful pollutant?

According to the World Health Organisation (WHO), Particulate Matter PM2.5 is considered to be the air pollutant which has the greatest impact on human health, as they are able to pass into the blood, and cause harm at very low levels.

Where does it originate from?

Pollution in Bromley 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 even the UK.

How does the weather or season impact?

Even though humans produce pollution, the weather will determine what happens once it is released into the air. For example, when it's windy or wet pollution concentrations remain low, either removed from the air by rain or blown away. When it's hot, dry and still, pollution levels climb, and pollution episodes can occur. Concentration levels are also higher in winter, as more people rely on their heating systems.

What are the health effects of poor air quality?

The Institute for Health Metrics and Evaluation estimates that air pollution is ranked as the 10th largest risk factor for mortality and ill-health in England.

Health and other impacts

It is now well understood that poor air quality contributes to asthma and exacerbates other pre-existing respiratory conditions, it is also a factor in the onset of cancer and heart disease. As research develops, our understanding of how poor air quality can adversely influence disparate topics increases.

Short-term exposure

Short-term exposure to high levels of air pollution usually occurs as a result of pollution episodes caused by the weather. These episodes can result in a range of adverse health effects, including exacerbation of respiratory conditions, such as asthma and chronic respiratory disease, through to an increase in emergency admissions to hospital.

Long-term exposure

The relative risk associated with long-term exposure is greater than for short-term. It occurs at a lower level than for short-term and contributes to the initiation, progression and exacerbation of disease. These effects are often not noticed by people at the time the damage is being done. Additionally, it is estimated that the average reduction in UK life expectancy associated with air pollution is 6 months.

Who's most at risk?

Poor air quality disproportionality affects the health outcomes of the very young, the elderly, the ill and the poor.

Key pollutants of relevance to Bromley

The main atmospheric pollutants of concern in Bromley are Nitrogen Dioxide (NO₂) and PM with fractions PM₁₀ (breathable) and PM_{2.5} (able to pass into blood stream).

The main source of both pollutants is traffic emissions, large scale combustion plant, construction sites and domestic heating.

Bromley Council meets all the national Air Quality Objectives (AQOs) other than for the annual mean limit for NO₂. We are currently meeting the national objectives for PM₁₀ and modelled data shows we should meet the objective for PM_{2.5} in 2020. However, as PM_{2.5} is damaging to health at any level, this remains a pollutant of concern. In recognition that there is no safe exposure limit for PM, this Action Plan commits to target compliance with WHO guidelines for these pollutants in the future.



Nitrogen Dioxide (NO₂)

All combustion processes produce oxides of Nitrogen (NO_x). In London, road transport and heating systems are the main sources of these emissions. NO_x is primarily made up of two pollutants - Nitric Oxide (NO) and Nitrogen Dioxide (NO₂). NO₂ is of most concern due to its impact on health, However, NO_x easily converts to NO₂ in the air - so to reduce concentrations of NO₂ it is essential to control emissions of NO_x.

Particulate Matter: PM10 and PM2.5

Particulate Matter (PM10 and PM2.5) is a complex mixture of non-gaseous particles of varied physical and chemical composition. It is categorised by the size of the particle (for example PM10 are particles with a diameter of less than 10 microns (µm)). This size of particulate is breathable.

Most PM emissions in London are caused by road traffic, in central London this is as much as 80%, with exhaust emission, tyre and brake wear and dust from road surfaces being the main sources.

Construction sites, with high volumes of dust and emissions from machinery are also major sources of local PM pollution, along with accidental fires and burning of waste. However, a large proportion of PM originates outside of London, and includes particulates from natural sources, such as sea salt, forest fires and Saharan dust.

The air quality objectives

Bromley meets all national AQOs for PM.

The following table presents the AQOs to be achieved. Benzene, 1,3-Butadiene, Carbon Monoxide (CO), Lead (Pb) and Sulphur Dioxide (SO₂) remain in the Regulations; however, the limits for these pollutants have been met for several years and are well below the national air quality objectives, as such, it is not necessary to report upon these pollutants. Therefore, the pollutants of concern for Bromley are NO₂, PM₁₀ and PM_{2.5}.

Air quality data is usually presented in one of two ways: as an annualised figure, reflecting the average concentrations of a particular pollutant, or as the number of hours in a year that pollution levels are at a particular level. This data either pertains to particular monitoring points, or modelled data.



Pollutant	Objective	Averaging period
Nitrogen Dioxide (NO ₂)	<ul style="list-style-type: none"> • 200µg/m³ not to be exceeded more than 18 times a year • 40µg/m³ 	<ul style="list-style-type: none"> • 1-hour mean • Annual mean
Particulate Matter (PM10)	<ul style="list-style-type: none"> • 50µg/m³ not to be exceeded more than 35 times a year • 40µg/m³ 	<ul style="list-style-type: none"> • 1-hour mean • Annual mean
Particulate Matter (PM2.5)	Work towards reducing emissions/ concentrations of fine PM2.5	Annual mean
Sulphur Dioxide (SO ₂)	<ul style="list-style-type: none"> • 266µg/m³ not to be exceeded more than 35 times a year • 350µg/m³ not to be exceeded more than 24 times a year • 125µg/m³ not to be exceeded more than 3 times a year 	<ul style="list-style-type: none"> • 15-minute mean • 1-hour mean • 24-hour mean
Benzene (C ₆ H ₆)	<ul style="list-style-type: none"> • 16.25µg/m³ • 5µg/m³ 	<ul style="list-style-type: none"> • Running annual mean • Annual mean
1,3-Butadiene (C ₄ H ₆)	2.25µg/m ³	Running annual mean
Carbon Monoxide (CO)	10mg/m ³	Maximum daily running 8-hour mean
Lead (Pb)	<ul style="list-style-type: none"> • 0.5µg/m³ • 0.25µg/m³ 	<ul style="list-style-type: none"> • Annual mean • Annual mean

The Air Quality Management Area (AQMA)

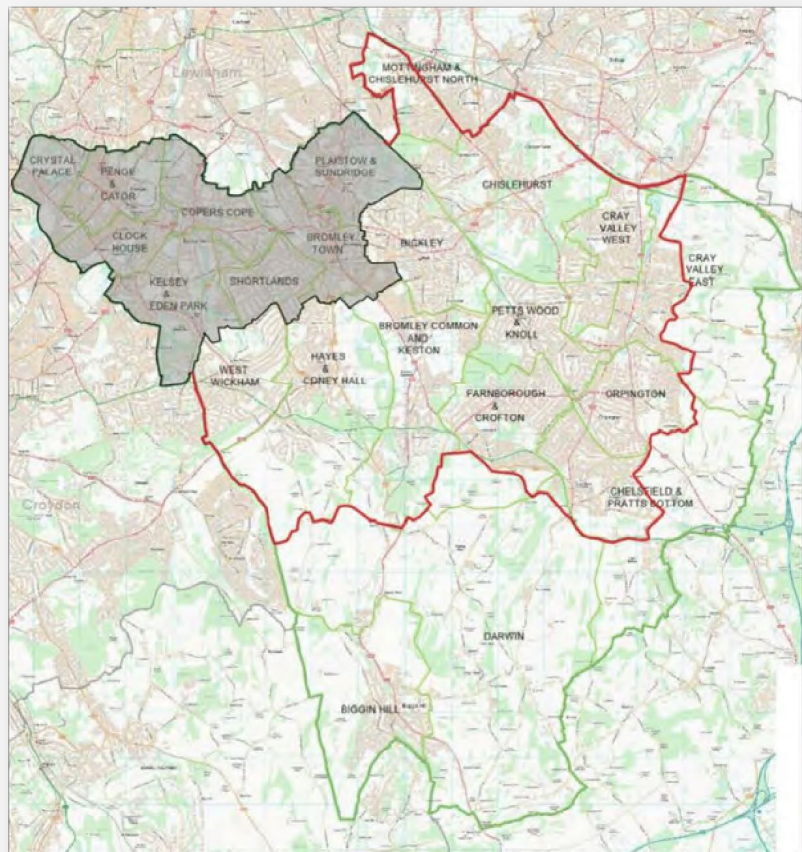
According to GLA modelled data, no primary or secondary schools in Bromley are exposed to NO₂ concentrations that exceed annual limits.

Where local authorities suspect they have levels of pollutants exceeding the National Air Quality Standards and Objectives, they are required to investigate potential exceedances with a view to implementing Air Quality Management Areas (AQMA). The declaration of an AQMA, places a statutory duty to monitor and take action to reduce levels of pollutants. Bromley declared an AQMA for NO_x in 2007 (grey shaded area on the map) for the North West of the borough. West of the borough.

However, as required by the LLAQM, from 2020 onwards, local monitoring and mapping provided by the GLA must be utilised to assess whether an AQMA should be revised.

The exercise was undertaken, and the 2020 modelled data, despite showing a decline in exposure levels over time, still supports an extension of the AQMA.

The map shows the extended boundary highlighted in red.

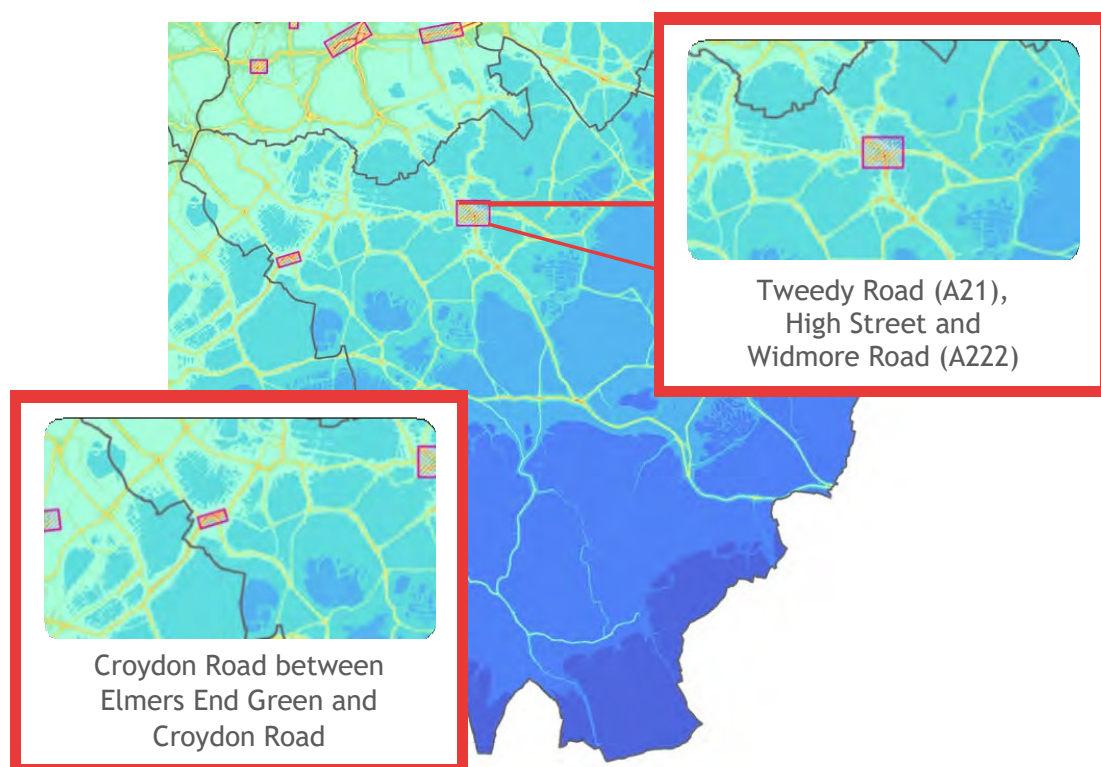


The Air Quality Focus Areas

Bromley meets all Air Quality Objectives for hourly and 24-hour concentrations.

In 2016 the LLAQM introduced the concept of Air Quality Focus Areas (AQFAs) across London. The AQFAs are described as areas where the risk of exceeding pollution limits is high and there is relevant public exposure. Local authorities must keep these areas under review and take positive action where possible to improve them.

The Focus Areas map highlights the two AQFAs within Bromley, these are:



Research into available funding is being undertaken with a view to removing the gyratory system at Elmers End Green to create a new public space and improvement of the cycling and walking routes to the station/tram stop.

The Council has less control over the Bromley Town Centre AQFA as it is vehicles on the A21 that pollute, and the road is the responsibility of TfL. However, the Council will work on proposals to reduce the need to drive to the town centre, and continue to lobby TfL to use less polluting buses.

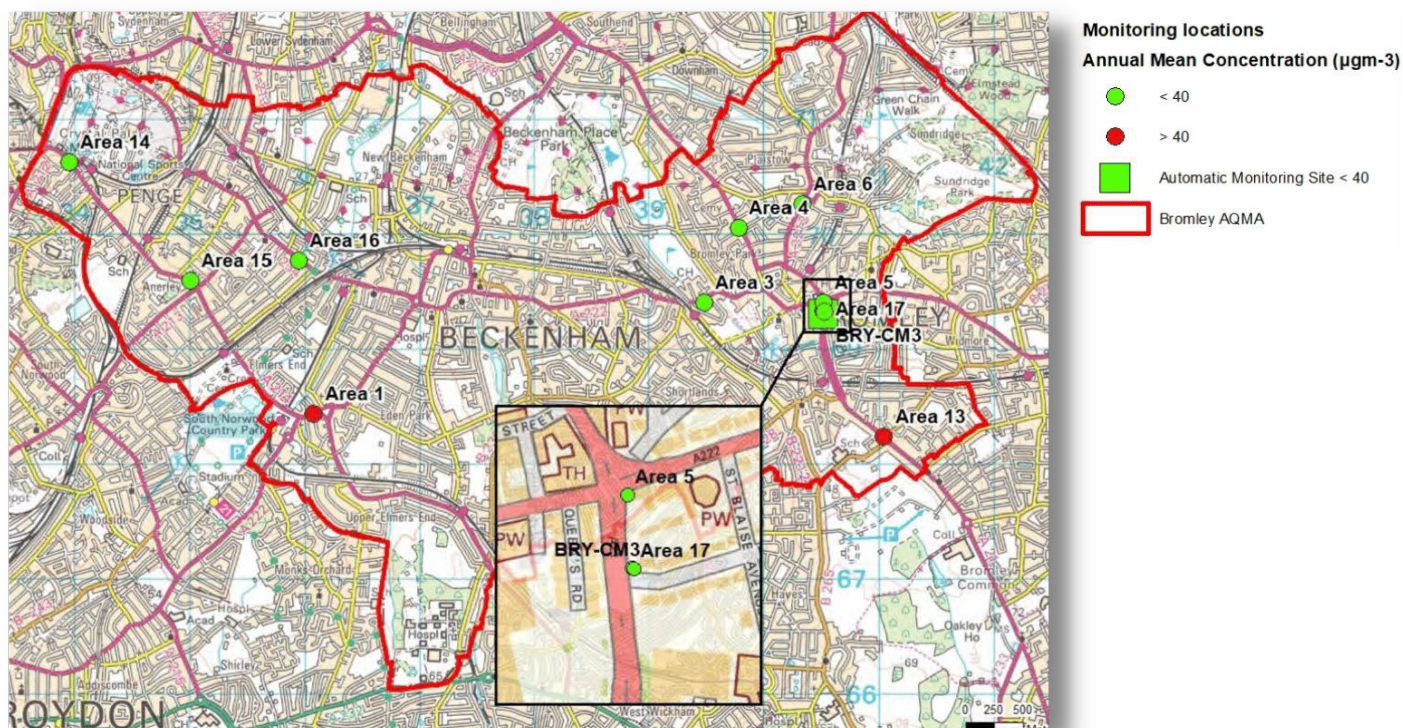
Monitoring data

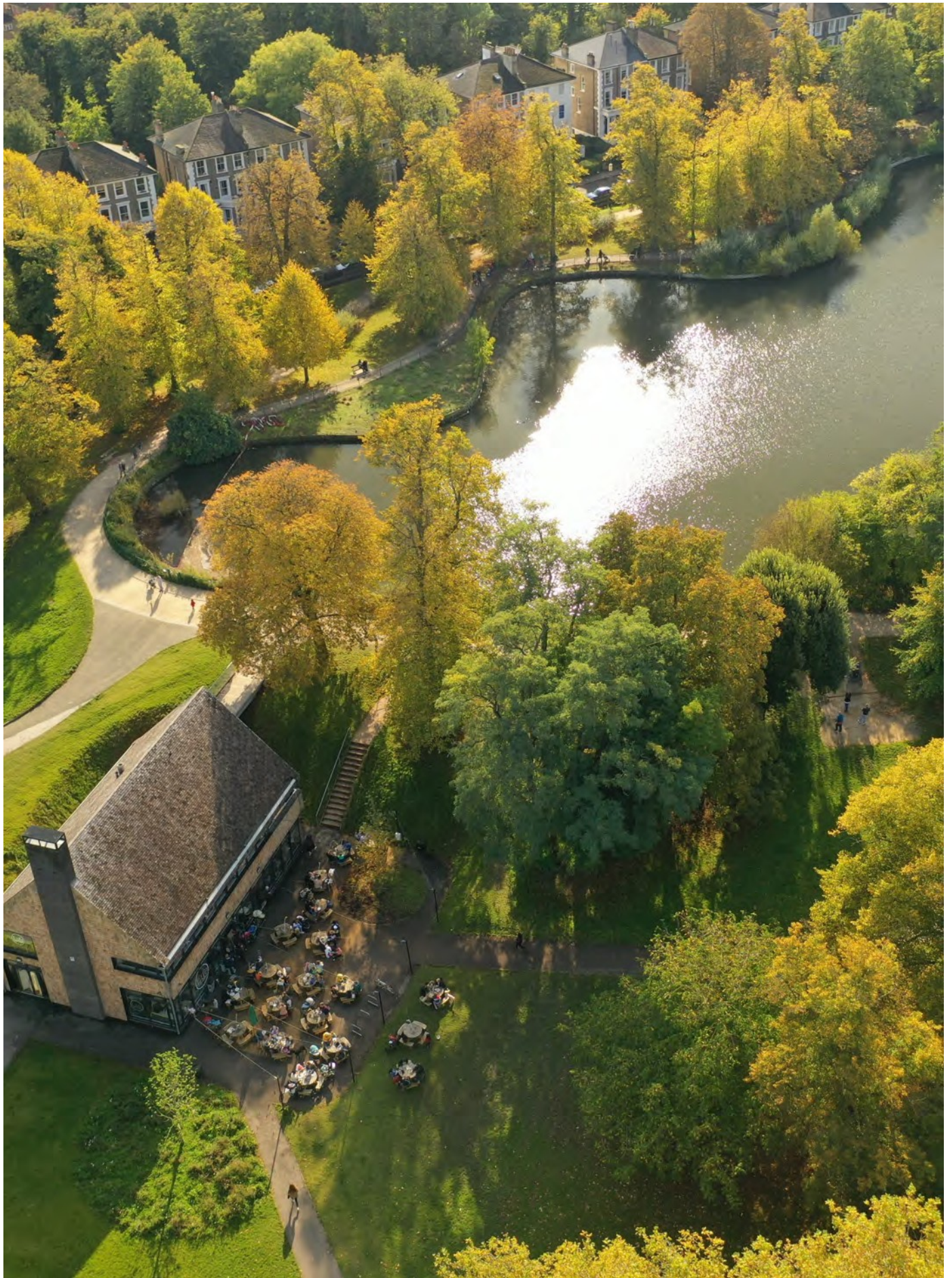
Bromley currently has ten passive monitoring sites in the borough with all sites located in the existing AQMA, and one co-located at the air quality monitoring station in Harwood Avenue.

As well as our own data, Bromley utilises modelled data from the London Atmospheric Emissions Inventory (LAEI), and both data sources show annual mean exceedances of the air quality objectives for NO₂ across the borough.

The NO₂ diffusion tube locations are shown on the map. The annual mean NO₂ objective of 40µg/m³ was exceeded at two of the ten NO₂ monitoring locations in 2018. It is important to note that this is the lowest number of annual mean NO₂ exceedances in all years since 2010.

The highest annual mean NO₂ concentration in 2018 was monitored at Elmers End Road with a value of 51.3µg/m³; however, the level measured at this location was the lowest since 2011.





Air quality in Bromley

Air quality is a major problem across all of London: all 33 London local authorities have declared AQMAs (some boroughwide), requiring them to take action to improve air quality in their local areas.

Air pollution is worse in the centre of London, where there is the heaviest concentration of traffic and buildings.

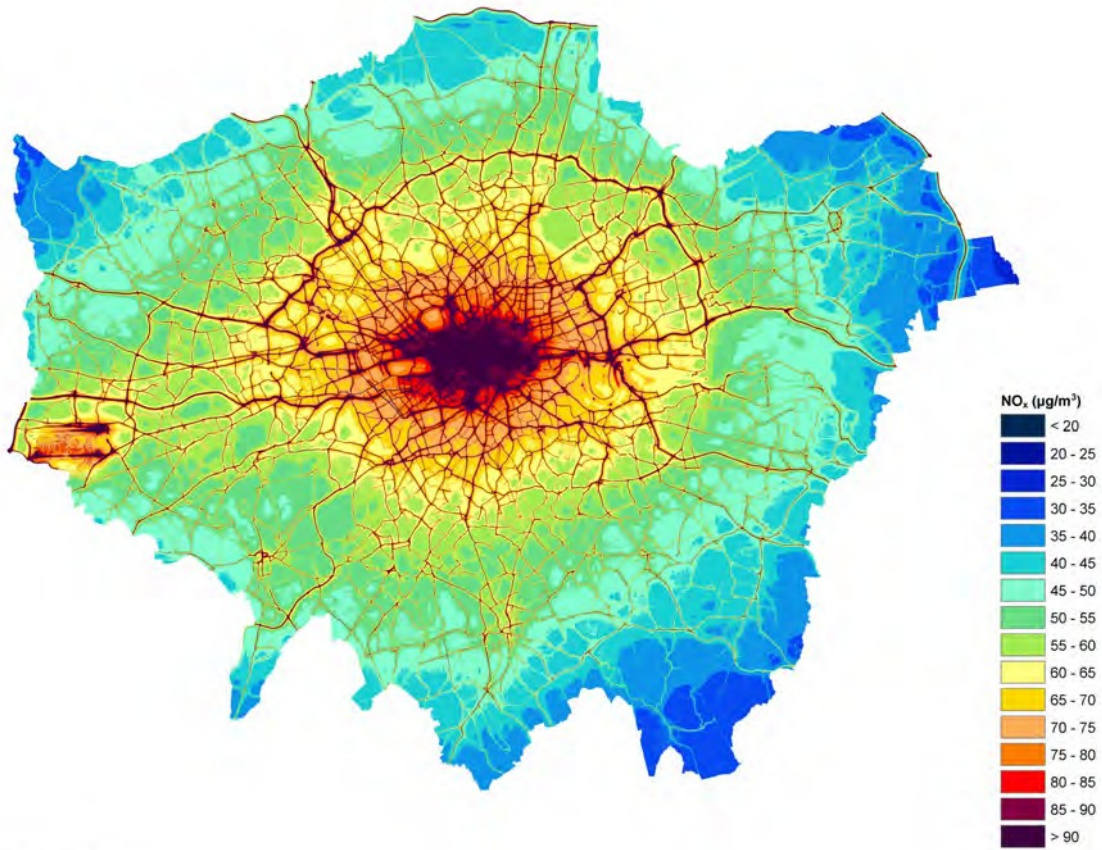
The LAEI is published by the GLA and TfL on an approximately four yearly cycle. Using a variety of source data, the LAEI atmospheric dispersion model collated in 2013 provided predicted estimates of ground level concentrations of the key pollutants NO_x, PM₁₀ and PM_{2.5} across Greater London for the year 2020. As of yet, the 2016 data does not have the predictions for 2020.

The LAEI modelled 2020 data is the most established source of air quality across London.

Of the pollutants of concern, in central London, NO₂ objectives are consistently breached, with exceedances in outer London tending to take place at the sides of busy roads.

The UK national annual PM₁₀ limit value is being met across London, but there are still isolated exceedances of short-term PM₁₀ at busy roads.

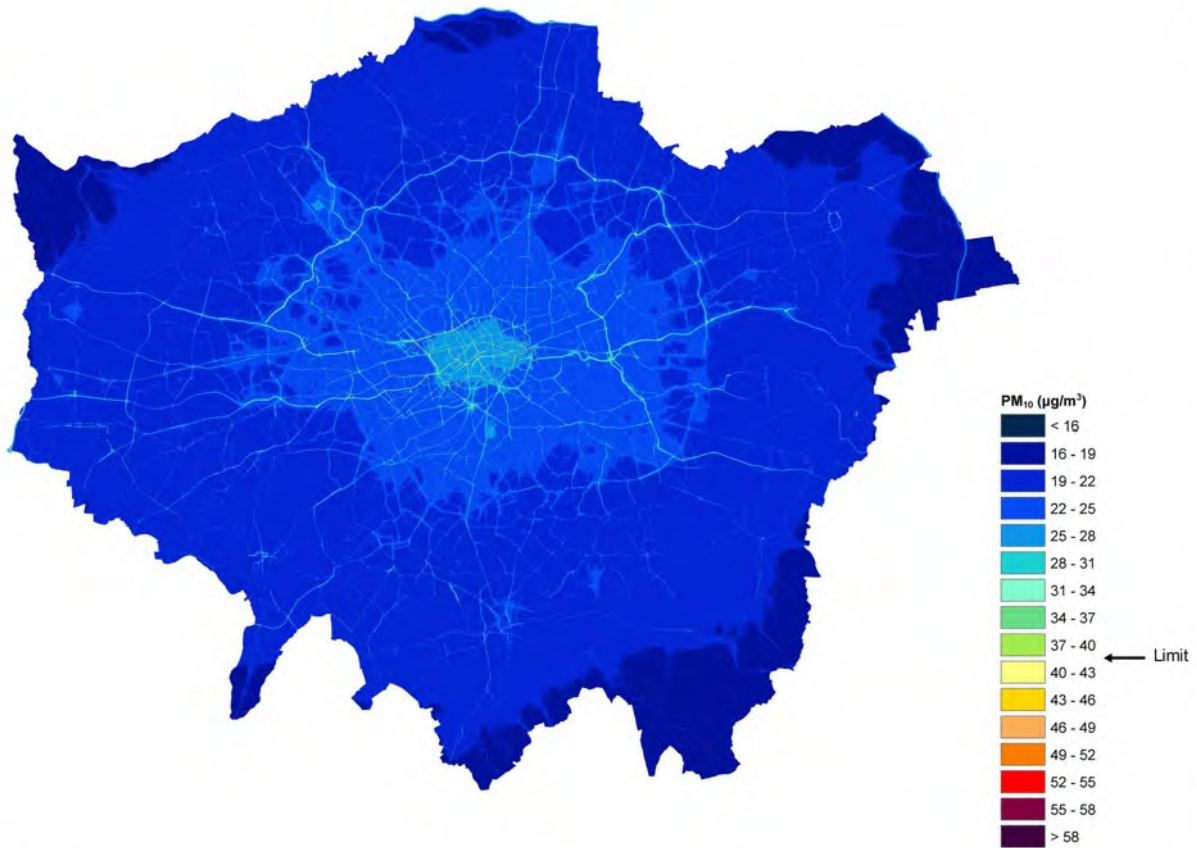
The following two maps show the overall picture in London for NO_x and PM₁₀. Blues and greens reflect areas in compliance with standards for these pollutants; oranges and reds represent exceedances of the annual limits.



London Atmospheric Emissions Inventory 2016

Annual mean NO_x concentrations 2016

LAEI 2016 - Greater London



London Atmospheric Emissions Inventory 2016

Annual mean PM₁₀ concentrations 2016

LAEI 2016 - Greater London

Air quality in Bromley: NO₂ and PM10

The following maps essentially reflect ‘zoomed in’ versions of the previous London-wide maps. These allow a greater understanding of the pollution as modelled to exist in Bromley 2020.

This data shows that in 2020 Bromley should meet all the national objectives at our monitoring points other than for the annual mean of NO₂. However, the data for Bromley shows that there has been some decline in NO₂ concentrations since 2010.

As with the rest of London, the highest pollution falls alongside busy main roads, such as the A21, A20 and A232. These roads are clearly distinguishable in the maps and show as light green due to their associated pollution levels.

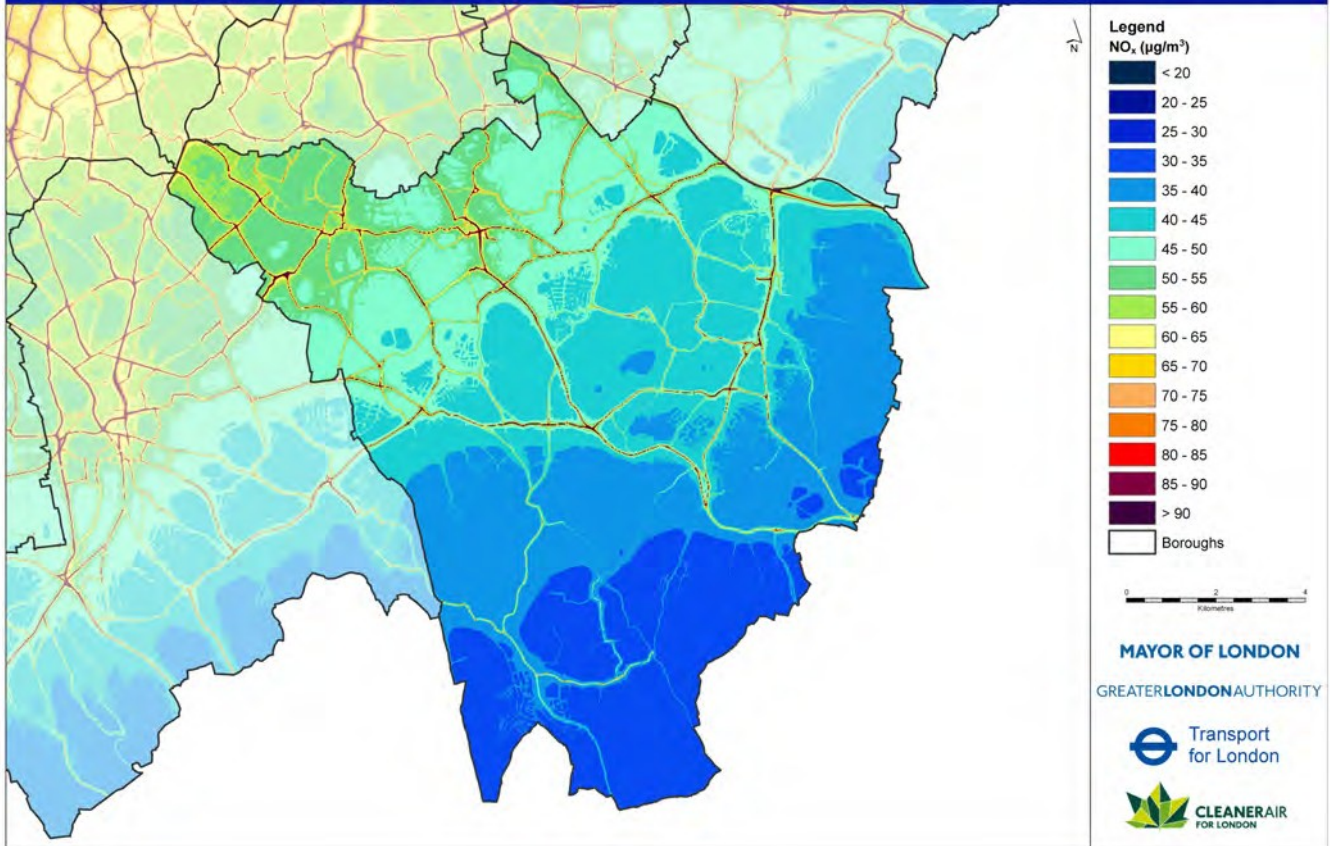
As most of the polluting roads in Bromley are operated and managed by TfL, our ability to limit air pollution from these roads is limited.

The colour changes show how the pollution gradient changes with distance, away from heavy traffic, and further demonstrates that the majority of the borough has pollution levels well below the target limit.

The modelled data for 2016 highlighted that Bromley met the current objective for PM10, and that almost half the borough met the current objective for PM2.5. The modelled data for 2020 shows that Bromley should meet the current objectives for both PM10 and PM2.5. However, as PM2.5 is considered to be damaging to health at any level, this remains a pollutant of concern.

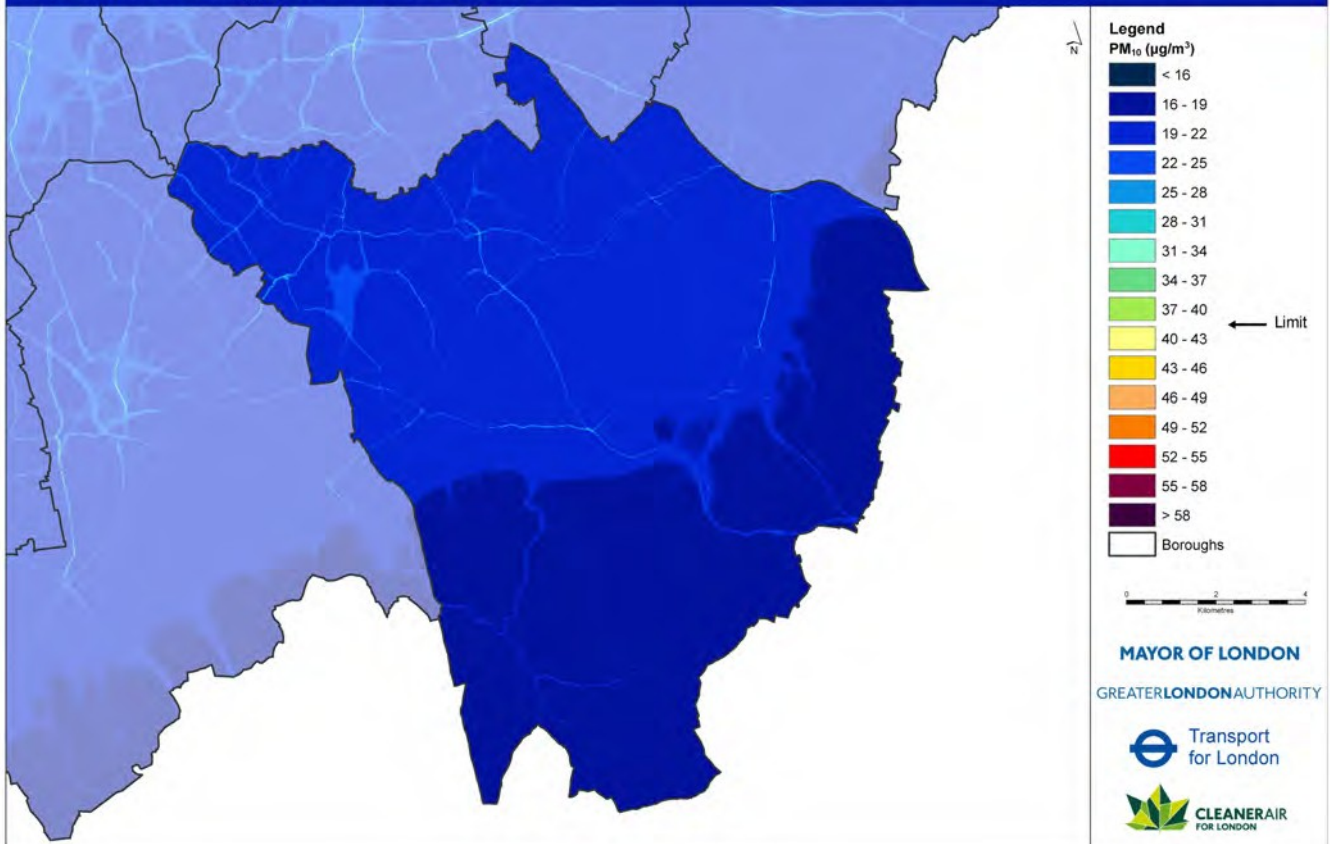
London Borough of Bromley
Annual Mean NO_x concentrations 2016

LAEI 2016



London Borough of Bromley
Annual Mean PM₁₀ concentrations 2016

LAEI 2016

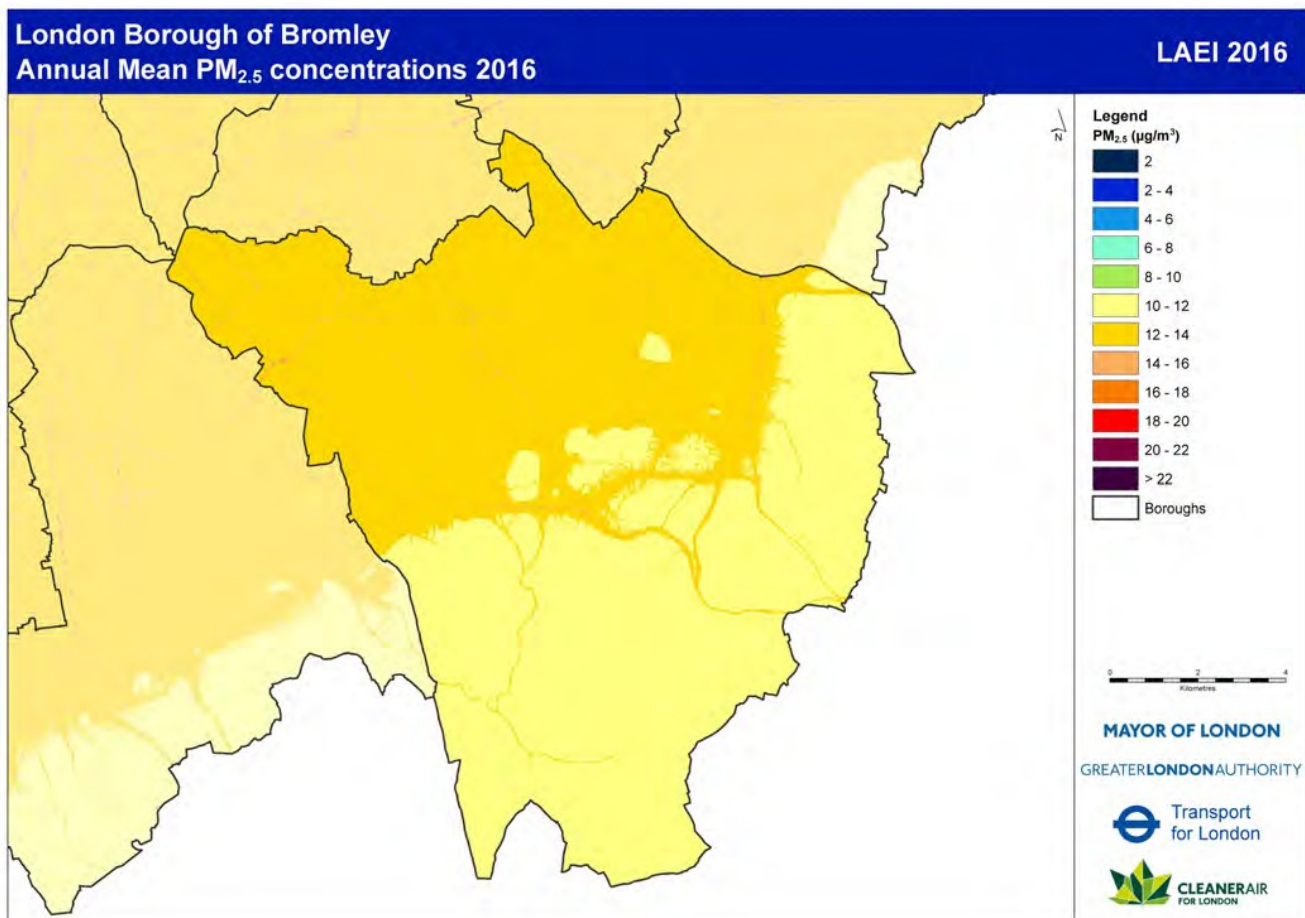


Air quality in Bromley PM2.5

Modelled data for 2018 and 2020 shows that Bromley has the lowest concentration levels of PM2.5 per weighted population.

As previously mentioned, the 2016 data highlights Bromley is meeting the current objective for PM10 and is predicted to meet the objective for PM2.5 in 2020 however as PM2.5 is considered to be damaging to health at any level this remains a pollutant of concern.

The WHO annual mean guidance limit for protection of human health is considered to be 10 micrograms per cubic metre of air. The 2016 LAEI modelled data showed that approximately half of the borough met this limit, and the other half had levels between 12 and 14 micrograms per cubic meter of air. The Defra data modelled in 2018 shows the average concentration per weighted population in Bromley is 10.4 micrograms per cubic meter of air. This level is the lowest of the London boroughs, and is below the maximum limits set in the Air Quality Objectives. However, it is marginally above the WHO guidelines, and therefore further efforts to reduce this are warranted if we are to meet this target, as is our ambition.



Source appointment: What are the sources of PM10?

PM10 emissions



Rail
0.05%



Other
4.21%



Domestic
12.29%



Resuspension
9.92%



0.13%
Aviation



47.60%
Industrial and
commercial



25.80%
Road transport

PM10 road transport emissions



TfL bus
5.10%



Motorcycle
0.69%



LGV petrol
0.16%



HGV rigid
6.96%



Car petrol
36.00%



Car electric
0.10%



1.66%
Non-TfL bus



15.29%
LGV diesel



0.02%
LGV electric



1.37%
HGV artic



32.64%
Car diesel

Source appointment: What are the sources of NOx and NO₂?

All combustion processes produce NOx. In London, road transport and heating systems are the main sources of these emissions. NOx is primarily made up to two pollutants – NO and NO₂.

NOx emissions tonnes



Rail
0.47%



Other
1.1%



Domestic
11.32%



Construction
12.44%



0.23%
Aviation



13.74%
Industrial and
commercial



60.69%
Road traffic

NOx road transport emissions



TfL bus
11%



Non-TfL bus
11.32%



HGV rigid
11%



Car diesel
37%



2%
Taxi



19%
LGV diesel



3%
HGV artic



12%
Car petrol

Of the NO₂ that originates in the borough, the graph above shows that 60% of NO₂ emissions come from road transport, and the second largest source being industrial and commercial. Sources within that category being industrial and commercial heating and industrial emissions. With regards to transport, it is clear that the largest contributors are diesel vehicles (diesel cars, LGV diesel and TfL buses).

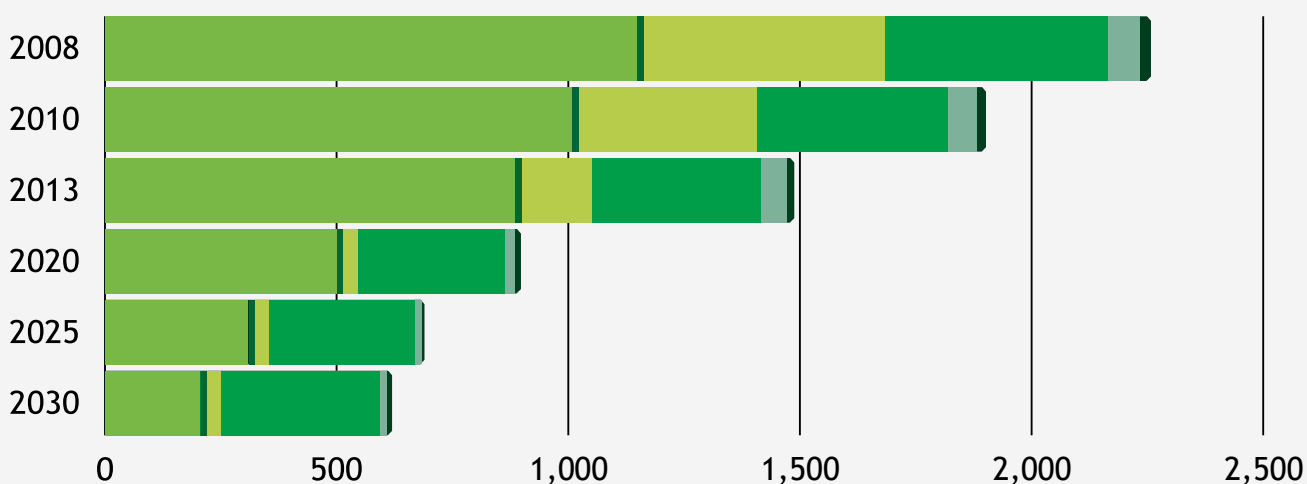
The future of air quality in Bromley

Data shows that Bromley's air quality has improved year on year since 2010.

The LAEI provides detailed modelling figures for future air quality levels across London. The following graphs show the modelled emissions forecast for Bromley for 2020, 2025 and 2030. A variety of inputs are included in the modelling to make these projections. For examples, projections for road transport emissions are based on factors including expected uptake of electric vehicles, general technological advancement (and reduced emissions) of petrol and diesel vehicles, overall demand for private cars, and major policy developments such as the ULEZ.

The following graph shows that NO_x levels are predicted to decrease rapidly between 2020 and 2025; reductions in road transport emissions (the green bar on the graph) constitute the largest area of emissions reduction. This is due to technological advances in transportation, an uptake of zero emissions vehicles and major policy interventions such as the Mayor of London's ULEZ. The second largest source of emissions, domestic and commercial gas (the red bar), are predicted to also decrease over the same period, but to a lesser extent. As a result, moving into the 2020s domestic and commercial gas is predicted to become the largest source of emissions in the borough.

NO_x emissions - Bromley



	2008	2010	2013	2020	2025	2030
Road transport	1,146	1,146	1,146	1,146	1,146	1,146
Aviation	3	3	3	3	3	3
Rail	14	13	13	11	11	11
NRMM	519	383	151	32	31	31
D&C gas	480	413	366	318	315	343
D&C other fuels	70	61	55	21	15	13
River	0	0	0	0	0	0
Industry	0	0	0	0	0	0
Other	24	21	16	13	6	13
TOTAL	2,256	1,900	1,485	896	689	618

D&C = Domestic and commercial | NRMM = Non-road mobile machinery

NOTES:

The summary graph represents emissions from each source stacked on top of one another, with the total stack height equalling the total emissions from all sources. The numbers in the table are those used to plot the graph and represent the tonnes of pollution emitted into the atmosphere in that year (T/y).

The emissions are combined into reasonably self explanatory "source types". However, the following categories require further explanation:

- Industry - the total emission from Parts A and B industrial processes combined
- NRMM - the total emission from construction and industrial off road machines combined
- Other - the total emission from a number of small sources, such as agriculture, outdoor fires, garden emissions, forests, waste and waste transfer combined






The five themes of the action plan

Bromley's vision is to both maintain and improve the overall air quality in the borough, and to work towards achieving the PM2.5 limits set by the WHO in the future.

We know we can't achieve this alone, therefore a holistic and collaborative approach will be taken with partners and stakeholders, to drive our ambitions forward.

Our action plan (Appendix A) has been split into five categories:



-  1 Monitoring air quality
-  2 Reducing emissions from buildings and new development
-  3 Public health and raising awareness
-  4 Reducing emissions from transport (including servicing freight and fleet)
-  5 Local solutions

As part of their statutory LLAQM duties, the GLA produced a matrix with 25 actions for boroughs to consider delivering locally as part of their LLAQM action planning obligations, and Bromley is committed to taking forward all of these actions. Working in partnership, we have also presented additional actions beyond the initial 25 points, and are committed to reduce levels of all pollutants as far as we are able to.

Over the next few pages each of the five themes is introduced, with key achievements over the lifetime of the action plan.

The full action plan matrix itself sets out all the actions grouped by the five key themes and is detailed in the Appendix.

Theme 1: Monitoring air quality



We will continue to monitor air quality to assess our compliance with Air Quality Limit Values, and against World Health Organisation targets.

Key actions from our action plan

1. We will expand our network of diffusion tube monitoring to cover the expanded AQMA
2. We will test emerging monitoring technologies including smartphone apps as they are developed
3. We will seek funding for automatic monitoring of PM10 and PM2.5





Theme 2: Reducing emissions from buildings and new developments

Emissions from demolition and construction work are key sources of Particulate Matter, specifically Non-Road Mobile Machinery is the major culprit, and non-compliant construction plant can cause highly localised spikes in pollution. We will ensure that all planning applications for major developments are conditioned to require compliance with the NRMM, meaning that plant will be compliant with relevant emissions standards, and our new Development Plan (incorporating the London Plan) will set a more demanding requirement for certain developments.

Key actions from our action plan

1. We will mitigate and minimise emissions from both existing buildings and from new development using a combination of policy, partnership working and specific projects and interventions
2. We will work towards creating a net zero emissions by 2029 for Council buildings

Within this plan the bar will be raised from aiming to achieve “air quality neutral” to “air quality positive” for the largest developments, and all major development proposals to “be at least air quality neutral”, submitted with an air quality assessment.

Key actions from our action plan

1. Revise our Code of Construction Practice for developers
2. Publish a holistic Carbon Reduction Strategy for Council buildings
3. Ensure NRMM compliant planning conditions are applied to all major developments

Theme 3: Public health and raising awareness



We will continue to inform residents, businesses and visitors about local air pollution levels, and by doing this we can help protect those who are most sensitive to its health impacts. We understand that by increasing the public's understanding of the sources and effects of air pollution can also influence changes in behaviour which in turn improve air quality, for example modal shift changes away from using a car to drive children to school towards other more sustainable forms of travel, and through promoting healthy lifestyles such as cycling and walking, all of which will result in decreased pollution.

Partnering with public health is another way we will work to increase awareness around air pollution; health professionals are trusted and independent voices who are able to help us reach out to those members of the community that are most adversely affected by air pollution, such as the elderly, and those who are hardest to reach, such as those whose first language is not English.

Key actions from our action plan

1. We will continue to support and disseminate information on high pollution episodes through alert systems such as airTEXT
2. We will build closer relationships between the Council and public health professionals including GPs to raise awareness of air pollution among traditionally hard to reach groups
3. We will undertake and promote anti-idling campaigns around schools
4. We will promote campaigns on cleaner smoke-free fuels for heating



Theme 4: Reducing emissions from transport

Road traffic is the single largest source of NO₂ emissions within Bromley. The geographically specific nature of road-related air pollution means that transport emissions also heavily contribute to air pollution hotspots across the borough. It is also an area of emissions that we as a local authority have only limited control over, on issues ranging from the tax regime for diesel vehicles (the responsibility of central Government) to emissions from black taxis and buses (the responsibility of TfL and the Mayor of London).

We will implement a range of measures to reduce emissions from transport sources through the borough. These will include actions for: delivering servicing and freight, greening our Council fleet and promoting cleaner transport.

Key actions from our action plan

1. We will improve the walking and cycling infrastructure and promote the use of greener routes such as the National Cycle Network
2. We will reduce emissions from the Council's fleet including the phased replacement of gritters in 2020 whereby Euro VI rated vehicles are introduced
3. We will minimise emissions from contractors by smart procurement measures
4. We will progress the installation of Ultra Low Emission Vehicle (ULEV) infrastructure, and ensure that with new housing developments 1 in 5 car parking spaces have an electric charge point
5. We will provide education on fuel efficiency as part of the driver induction process of all new staff
6. We will be promoting the use of alternative transport for those staff (including the provision of electric bikes) who undertake visits where possible

Theme 5: Local solutions



These measures seek to improve the environment of neighbourhoods through a combination of measures.

Key actions from our action plan

1. We will identify opportunities for greening infrastructure through the planning process
2. We will undertake a feasibility study for enhancing the public realm potentially through gyratory removal at Elmers End
3. We will deliver the Shortlands Friendly Village Scheme



Appendix 1 - The GLA Matrix Air Quality Action Points



Action 01

Ensure that appropriate and effective monitoring is undertaken across Bromley to meet statutory obligations.



Description of actions	Evidence and KPIs	Responsibility	Magnitude of benefit	Date
Ongoing maintenance of the Harwood Ave air quality monitoring station (AQMS)	Target: data capture over 90%	Environmental Protection		Ongoing
Publish an annual report of air quality data on Bromley's website	The successful submission and publication of Annual Status Reports and other statutory documents to the GLA	Environmental Protection		Annually
Seek funding where appropriate (via s106 agreements) for reference monitoring in Bromley	Submissions	Environmental Protection		Ongoing
Review of diffusion tube network following the extension of the AQMA and add additional diffusion monitoring points	Appropriately site 20 additional diffusion tube monitoring points within the extended zone of the proposed new AQMA. Roll out to commence by January 2021	Environmental Protection		January 2021
Seek funding for AQMS to measure PM10 and PM 2.5 NO ₂ and O ₃ at Biggin Hill by local agreement	Submissions and implementation if successful	Environmental Protection		Ongoing
Prioritise the provision of a PM2.5 monitor if installing new monitors	Business Case completed, efforts to source funding for new monitors ongoing"	Environmental Protection		Ongoing

Magnitude of Benefit



High



Medium



Low

Action 01 - cont'd

Ensure that appropriate and effective monitoring is undertaken across Bromley to meet statutory obligations.



Description of actions	Evidence and KPIs	Responsibility	Magnitude of benefit	Date
Seek to test appropriate new smart monitoring technologies as they develop	Report based on horizon scanning and reviewing of current and emerging technology	Environmental Protection		March 2022
Continue to support major developers in siting and installing construction site dust monitors	Advice given through planning consultation system. Outputs – number of planning conditions/reports provided. Reported annually in the ASR	Environmental Protection		Annually
Membership of the LAQN	Membership status renewed	Environmental Protection		Annually
Borough review of Part B (Environmental Permitting) processes to ensure all relevant process are captured	<p>Borough wide review to be completed by the end of 2021</p> <p>Target: 100% of relevant sites permitted</p> <p>Output – number of additional new permits issued</p>	Environmental Protection		December 2021

Magnitude of Benefit



High



Medium



Low

Action 02

Ensuring emissions from demolition and construction are minimised.



Description of actions	Evidence and KPIs	Responsibility	Magnitude of benefit	Date
Require Construction Environmental Management Plans for 100% of major developments where works are likely to produce levels of dust	CEMPs submitted with mitigation for dust or as required by planning condition. Target: 100% of relevant sites have CEMPs in place.	Planning		Ongoing
Require real-time PM10 monitoring at high risk sites in accordance with the Mayor of London SPG	Monitors installed on relevant sites. Target: 100% of new high-risk sites have monitoring in place.	Planning and Environmental Protection		Ongoing
Enforcement visits when complaints received	Visits undertaken and enforcement actions as and when they are received. Target: 100% of complaints investigated	Environmental Protection		Ongoing
Update Bromley's existing Code of Construction Practice	Code to be revised by end of 2021	Environmental Protection		December 2021
Produce information for developers to promote low combustion and combustion free development	Informative produced	Environmental Protection		December 2021

Magnitude of Benefit



High



Medium



Low

Action 02 - cont'd

Ensuring emissions from demolition and construction are minimised.



Description of actions	Evidence and KPIs	Responsibility	Magnitude of benefit	Date
Adopt revised planning conditions and informatives regarding the use of diesel generators	Adoption of any additional information/ Informatives. To commence immediately, to be formally implemented by the end of 2021	Environmental Protection		December 2021
Effectively manage and mitigate emissions of development taking place in the designated AQFAs through New Bromley Plan	Number of relevant applications assessed in Focus Areas with additional requirements	Planning		Ongoing
Where appropriate, use planning obligations to secure funding from developers for monitoring compliance checks on major and/or sensitive sites	Amount of funding secured	Planning and Environmental Protection		Ongoing
Continue to assess all relevant planning applications for their air quality impact and condition as appropriate	Number of applications assessed, against no received within 28 days. Target: 100% of relevant applications assessed	Environmental Protection		Ongoing

Magnitude of Benefit



High



Medium



Low

Action 03

Ensuring enforcement of Non-Road Mobile Machinery (NRMM) air quality policies.



Description of actions	Evidence and KPIs	Responsibility	Magnitude of benefit	Date
Apply conditions for construction sites to ensure compliance with the GLA's NRMM requirements *Planning conditions to include where appropriate: Air Quality Assessment AQN assessment CEMP to include PM10 monitoring NRMM compliance with London LEZ Seek funding for air quality measures through S.106, CIL where feasible	<p>Number of developments registered and compliant.</p> <p>Target: NRMM planning condition applied to 100% of relevant sites</p>	Environmental Protection and Planning Enforcement		Ongoing
Ensure emissions from construction sites are minimized through cooperation with developers and site visits, including effective dust monitoring where appropriate, and compliance with GLA NRMM requirements	<p>Compliance visits undertaken and number of reactive visits to complaints and appropriate enforcement outcomes.</p> <p>Targets: A minimum of 10 site audits annually (subject to enough sites meeting the criteria).</p>	Environmental Protection and Planning Enforcement		Annually

Magnitude of Benefit



High



Medium



Low

Action 04

Reducing emissions from CHP and ensure smaller developments use ultra-low NOx boilers.



Description of actions	Evidence and KPIs	Responsibility	Magnitude of benefit	Date
Require developments with CHP to be air quality neutral as a minimum	Number of developments where AQ neutral is applied. Target: 100% of relevant sites.	Planning		Ongoing
Require developers to meet the GLA's emissions limits for Combined Heat and Power (CHP) and Biomass boilers	Number of developments where AQ neutral is applied. Target: 100% of relevant sites.	Planning		Ongoing
Set requirement for evidence of maintenance of CHP and associated plant	Number of developments where AQ neutral is applied. Target: 100% of relevant sites.	Carbon Management		Ongoing



Magnitude of Benefit



High



Medium



Low

Action 05

Enforcing Air Quality Neutral Policies.



Description of actions	Evidence and KPIs	Responsibility	Magnitude of benefit	Date
Apply Air Quality Positive for regeneration areas in line with the new London Plan	<p>Agree standard planning conditions to require compliance with AQN standards and London Plan policy.</p> <p>Output - number of conditions applied</p>	Planning		Ongoing from 2020
Set requirement for evidence of maintenance of CHP and associated plant	<p>Number of relevant developments applied.</p> <p>Target: 100%</p>	Planning		Ongoing



Magnitude of Benefit



High



Medium



Low

Action 06

Ensuring adequate, appropriate, and well located green space and infrastructure is included in new and existing developments, where appropriate.



Description of actions	Evidence and KPIs	Responsibility	Magnitude of Benefit	Timeline
Planning application / conditions - Set targets to improve levels of green infrastructure provided in new developments. *To be considered on a case-by-case basis through application of relevant London Plan Policies	To be considered on a case-by-case basis through application of relevant London Plan Policies. Output target: number of sites including GI	Planning Development and Control		Ongoing
Ensure that exposure to poor air quality in amenity spaces is considered at design stage and as part of the AQA. *To be considered on a case-by-case basis through application of relevant London Plan Policies	To be considered on a case-by-case basis through application of relevant London Plan Policies. Output target: number of sites including GI	Public Health and Environmental Protection		Ongoing

Magnitude of Benefit



High



Medium



Low

Action 07

Ensuring that Smoke Control Areas (SCA) are appropriately identified and fully promoted.



Description of actions	Evidence and KPIs	Responsibility	Magnitude of benefit	Date
Carry out awareness campaigns in relation to bonfires and wood burning stoves and provide advice on appropriate fuel by issuing guidance	Guidance to be produced by the end of 2021 and to be promoted through newsletters including 'Environment Matters'. Estimated engagement can be demonstrated through circulation outputs, website page hits. We will circulate to providers of fuels and relevant businesses, demonstrated through number of correspondences.	Public Health and Environmental Protection		December 2021
Effectively fulfil statutory duties as a Smoke Control Area	Promotion and education campaign and respond to complaints Target: Minimum 1 campaign a year and 100% response to complaints.	Environmental Protection		Annually
Continue to control emissions from permitted processes through inspections and enforcement (see also action 1)	Number of sites with permits related to Local Air Pollution Prevention and Control guidance. Inspection audits undertaken as set by risk assessments per premises. Target: 100% of all relevant sites to have appropriate permit	Environmental Protection		Ongoing

Magnitude of Benefit



High



Medium



Low

Action 08

Deliver energy efficiency retrofitting projects in workplaces and homes through EFL retrofit programmes such as RE:NEW, RE:FIT and through borough carbon offset funds to replace old boilers /top-up lost insulation in combination with other energy conservation measures.



Description of actions	Evidence and KPIs	Responsibility	Magnitude of benefit	Date
Promoting and delivering energy efficiency retrofitting projects in workplaces and homes	ECO Flex declarations commenced in 2017. The projected figure for Bromley in 2019/20 is 12 declarations covering 53 households with an escalation year on year. Target: 5% minimum increase annually.	Housing		Annually
Follow up proposals for inclusion in a revised policy for the retrofitting of air pollutant reduction equipment for clients living in areas identified as most likely to trigger detrimental health effects	Revised policy published	Housing		December 2021
Continue with the advice service for households at risk of fuel poverty in south east London. Target- to carry out 800 home visits and 800 one-to-one advice sessions at events across South East London including Bromley	Provide advice to a minimum of 37 Bromley households	In Partnership with Neighbouring boroughs (South East)		Ongoing
As part of a current review of the use of discretionary grant funding linked to Disabled Facilities Grants and the Better Care Fund	Review funding- Target March 2022	Housing		March 2022

Magnitude of Benefit



High



Medium




Low

Action 08A

Promoting and delivering energy efficiency projects in council buildings
– leading by example.



Description of actions	Evidence and KPIs	Responsibility	Magnitude of benefit	Date
<p>All projects have a demonstrable carbon reduction and will be appraised independently. Overall organisational emissions reductions will be evidenced in the Council’s Carbon Management Programme. Carbon Management Programmes and other energy emissions reports can be viewed at: bromley.gov.uk/info/2001105/sustainability*Individual timescales depend on project scope; the financial investment and works required vary. All projects feed into on-going carbon management programme, each lasting 5 years. Costs are project specific to include SEELS and SALIX loans</p>	<p>100% appraisals undertaken of relevant projects and annual report provided</p>	<p>Carbon Management</p>		<p>Annually</p>

Magnitude of Benefit



High



Medium



Low

Action 08B

Update local authority procurement policies to reduce pollution from logistics and servicing, and to maximise air pollution benefits.



Description of actions	Evidence and KPIs	Responsibility	Magnitude of benefit	Date
Production of a sustainability toolkit for service leads to consider sustainability issues including carbon and air quality when initiating the procurement process.	Toolkit developed and workshops provided to relevant services.	Procurement and Carbon Management		January 2022
Seek to influence supplier behaviour through Circular Economy principles: reduced journeys, shared services, product life extension, waste minimisation, energy recovery from waste	100% Contracts analysed and report provided annually	Procurement and Carbon Management		Annually

Action 09

Ensure master planning and redevelopment areas are aligned with Air Quality Positive and Healthy Street approaches.



Description of actions	Evidence and KPIs	Responsibility	Magnitude of benefit	Date
Update ASR and planning portal.	Portal updated.	Development Control		December 2021

Magnitude of Benefit



High



Medium



Low

Action 10

Public Health department taking shared responsibility for borough air quality issues and supporting implementation of Air Quality Action Plans.



Description of actions	Evidence and KPIs	Responsibility	Magnitude of benefit	Date
The Health and Wellbeing Board will include a new section within the Joint Strategic Needs Assessment (JSNA) with up to date information on air quality impacts on the population *Public Health Team to support engagement with local stakeholders (businesses, schools, community groups and healthcare providers)	Production of JSNA	Public Health		December 2021

Action 11

Engagement with businesses. This could be linked to the engagement with town centre BIDS proposed in the final LIP to promote active and public transport options to their members, reducing pollution in town centres through mode shift.



Description of actions	Evidence and KPIs	Responsibility	Magnitude of benefit	Date
Promote active travel and public transport to businesses. The Council will host events such as free cycle training and Dr Bike sessions for BIDs who are proactively engaged	Record number of businesses actively engaged with emissions reductions initiatives and provide annual report. Produce baseline for 2020 and target increase 10% per annum.	Traffic and Road Safety		Annually

Magnitude of Benefit



High



Medium



Low

Action 12

Promotion of availability of airTEXT.



Description of actions	Evidence and KPIs	Responsibility	Magnitude of benefit	Date
Public Health team to support promotion through GP practices and pharmacies Membership of airTEXT consortium	<p>No. of signups to the AirTEXT Alerts - Promoted through dissemination through 40 GP Practices and 20 Pharmacies with an estimated distribution of 50,000 residents.</p> <p>Produce baseline for 2020 and target increase 10% per annum.</p>	Public Health and Enviro Protection also self-promotion by AirTEXT		Ongoing



Magnitude of Benefit



High



Medium



Low

Action 13

Encourage schools to join the TFLs STARS accredited travel planning programme by providing information on the benefits to schools and supporting the implementation of such a programme.



Description of actions	Evidence and KPIs	Responsibility	Magnitude of benefit	Date
<p>Use of the STARS programme in schools as a tool to promoting active travel to school. The Council will consider infrastructure enhancements proposed in the travel plan of Gold accredited schools as part of its annual LIP programme. Bronze or Silver STARS accredited schools will be encouraged to gain Gold accreditation.</p> <p>*The vast majority of schools in Bromley promote travelling to school by methods other than car. Initiatives such as ‘Walk on Wednesday’ the ‘Walking Bus’ and ‘Bikeability’ all contribute to an environment where being active is a normalised part of day to day life for families in Bromley.</p>	<p>Number of Bronze, Silver Gold accreditations.</p> <p>Currently 76% of schools have active travel plans. Target - The Council will seek to maintain more than 75% of schools with an active travel plan with a target score for quality of >180.</p>	<p>Traffic and Road Safety</p>		<p>Ongoing</p>

Magnitude of Benefit



High



Medium




Low

Action 14

Air quality in and around schools.



Description of actions	Evidence and KPIs	Responsibility	Magnitude of benefit	Date
<p>Ongoing co-ordination of the Heathy Schools London in Bromley project, to improve children and young people's health and wellbeing. Target is to add 5% more schools each year. *over ninety schools currently participating. London Healthy Early Years (HEYL) supports and recognises achievements in child health, wellbeing and education in early years settings. Well over one hundred Bromley Early Years settings have already registered with a target of an additional 5% year on year.</p>	<p>5% target annual increase achieved annually.</p>	<p>Public Health</p>		<p>Annually</p>

Magnitude of Benefit



High



Medium




Low

Action 14 - cont'd

Air quality in and around schools.



Description of actions	Evidence and KPIs	Responsibility	Magnitude of benefit	Date
<p>The borough is currently undertaking a trial of a green screen around Valley Primary School as part of the Shortlands Friendly Village (Liveable Neighbourhood) project. If successful, consideration will be given to how the green screens can be delivered to more schools in the AQMA. *This delivers on the LIP3 commitment to look to undertake a trial of new green infrastructure, such as trees and green walls around schools in the AQMA and alongside corridors with the highest concentrations as a means of natural emissions capture.</p>	<p>Results of trial published.</p> <p>Seek funding for at least one additional green screen per year for duration of the plan.</p>	<p>Traffic and Road Safety</p>		<p>March 2021</p> <p>End of plan 2025</p>

Magnitude of Benefit



High



Medium



Low

Action 14 - cont'd

Air quality in and around schools.



Description of actions	Evidence and KPIs	Responsibility	Magnitude of benefit	Date
Promote campaign on anti-idling, involving specific signage, communications activity and increased enforcement in idling hotspots around 8 schools (see also 20). *A more targeted approach to idling, focusing on schools will be taken, which should make a differences in areas over short periods of time, utilising a variety of communications and enforcement action.	No. of FPNs or verbal warnings given, campaigns undertaken and locations targeted (see also 21). Report annually.	Traffic and Road Safety		Ongoing



Magnitude of Benefit



High



Medium



Low

Theme 4

Reducing emissions from transport

Action 15

Update local authority procurement policies to reduce pollution from logistics and servicing.



Description of actions	Evidence and KPIs	Responsibility	Magnitude of benefit	Date
Seek to influence supplier behaviour through circular economy principles: reduced journeys, shared services, product life extension, waste minimisation, energy recovery from waste.	Contracts analysed – dependent timeframes relate to contract end/ renewal. Target 100% of contracts analysed.	Commissioning and Procurement		August 2021
Require suppliers with large fleets to have attained Bronze / Silver / Gold Fleet Operator Recognition Scheme (FORS) accreditation. *Bromley's LIP3 sets out a road map to reducing emissions from the LBB fleet to 2041 and working with procurement, the Council will be asked to consider how they could ask contractors to innovate towards a greener fleet and to reduce emissions from the Council's fleet.	No. of suppliers accredited - report provided. Produce baseline for 2021 and target increase 5% per annum.	Strategic Transport		April 2021 and annual report

Magnitude of Benefit



High



Medium



Low

Action 16

Reducing emissions from deliveries to local businesses and residents.



Description of actions	Evidence and KPIs	Responsibility	Magnitude of benefit	Date
Sustainability toolkit for service leads to consider sustainability issues including carbon and air quality when initiating the procurement process. Will require measurements that are proportional and appropriate to contract size.	Toolkit produced and implemented.	Commissioning and Procurement		April 2021
LB Bromley Sustainability Policy to be further developed.	Policy updated and published.	Strategic Transport		July 2021
The Council will continue to seek to work with collection locker providers to provide such facilities in some borough car parks to reduce delivery miles.	Provision of facilities installed. Target: 100% of car parks to have lockers by 2025 where feasible. Progress reported annually.	Third Party Agencies		End of Plan 2025

Magnitude of Benefit



High



Medium




Low

Action 16 - cont'd

Reducing emissions from deliveries to local businesses and residents.



Description of actions	Evidence and KPIs	Responsibility	Magnitude of benefit	Date
<p>Any development likely to create a significant number of trips will, where necessary, is required to enter into an agreement to submit and implement acceptable Construction Logistics Plans, and Delivery/ Servicing Plans. Consideration will be given to re-organisation of freight to support consolidation (or micro-consolidation) of deliveries, by setting up or participating in new logistics facilities, and/or requiring that council suppliers participate in these.</p>	<p>Target 100% CLP and SDP submitted for all relevant developments.</p>	<p>Planning</p>		<p>Ongoing</p>

Magnitude of Benefit



High



Medium



Low

Action 17

Reducing emissions from Council fleets.



Description of actions	Evidence and KPIs	Responsibility	Magnitude of benefit	Date
Council fleet and hired fleet to meet Quality Standard. Operating data and feedback will be collected to help inform future replacements and procurement projects.	Target 100% compliance with standard. Progress reported annually.	Transport operations		End of plan 2025
Increase the number of plug-in hybrid and electric council vehicles through planned replacement programme.	No. increased. The Council is committed to Carbon Free Emissions by 2029 – Annual report on increase.	Neighbourhood Management and Transport		Ongoing
Increase the uptake of new Euro VI vehicles in the heavier fleet, phase out older vehicles operated by our contractors by April 2020.	No. Increased, and older fleet phased out in target time.	Commissioning and Procurement		April 2020
Promote fuel-efficient driving through the driver induction and competence checks.	Target 100% of all new drivers to receive an induction – report annually.	Transport		Annually
Work in partnership with our Waste contractor to ensure our infrastructure allows for a fully electric waste collection fleet in 2026.	Improvement in infrastructure. Target: fully electric fleet by 2026 (beyond the plan) Progress reported annually.	Neighbourhood Management		2026

Magnitude of Benefit



High



Medium



Low

Action 17 - cont'd

Reducing emissions from Council fleets.



Description of actions	Evidence and KPIs	Responsibility	Magnitude of benefit	Date
Monitor progress with vehicle manufacturers, other similar operators and technical developments to further support the intake of alternatively fueled vehicles.	Monitoring undertaken. Target: 6 monthly review.	Neighbourhood Management		Annually
Increase the use of pool vehicles.	Uptake monitored and reported annually. Produce baseline for 2020 and target increase 10% minimum per annum.	Neighbourhood Management		Annually
Maintain the FORS accreditation held by the Council's Waste, Streets and Parks contractors.	Accreditation in place. Contractors will be encouraged to attain gold accreditation.	Neighbourhood Management		Ongoing
Equip waste vehicles with the 'Driving Efficiently and Safely' (DES) tracking and monitoring system to monitor and minimise idling, braking, over-revving, and contravention of speed limits.	No. of vehicles equipped- report annually. Produce baseline for 2020 and target increase 5% minimum per annum.	Neighbourhood Management		Ongoing

Magnitude of Benefit



High



Medium



Low

Action 17 - cont'd

Reducing emissions from Council fleets.



Description of actions	Evidence and KPIs	Responsibility	Magnitude of benefit	Date
Supervisors of the waste and street cleansing service to use electric vehicles.	Target – minimum of 12 electric vehicles fully operational by March 2020.	Neighbourhood Management		March 2020
Installation of electric charging point for HGV's.	Installation of points – Target minimum of 5 points by 2021.	Transport		December 2021
Increase the % of mobile equipment used (e.g. electric chainsaws) by the Arboriculture contractor.	Produce baseline for 2020 and target Increase over the current 30% level over the term of the AQAP.	Neighbourhood Management		End of plan 2025

Action 18

Staff Lease Car Scheme.



Description of actions	Evidence and KPIs	Responsibility	Magnitude of benefit	Date
Promote the uptake of alternative fuel cars via the staff lease scheme. The option to further incentivise drivers will be a discussion point when approaching the next procurement exercise.	14% of the fleet is now hybrid/plug in or pure electric - Target minimum 5% increase over this level reported annually.	Transport operations		Ongoing

Magnitude of Benefit



High



Medium



Low

Action 19

Ensure that Transport and Air Quality policies and projects are integrated.



Description of actions	Evidence and KPIs	Responsibility	Magnitude of benefit	Date
Through this AQAP and Bromley's LIP3 officers will continue dialogue regarding project and policy implementation. *Transport and Environmental Health staff form part of core AQAP Steering Group.	Ongoing monitoring. Target: quarterly reviews undertaken.	Highways and Public Protection		Annually

Action 20

Discouraging unnecessary idling by taxis, coaches and other vehicles.



Description of actions	Evidence and KPIs	Responsibility	Magnitude of benefit	Date
The Council is participating in the London-wide anti-idling campaign funded from the Mayor's Air Quality Fund with eight schools in the borough to hold anti-idling campaigns per annum. PCN enforcement will allow for a significantly higher penalty for idling to be applied.	Target: Minimum of 8 campaigns annually - report annually.	Traffic and Road Safety		Annually

Magnitude of Benefit



High



Medium



Low

Action 20 - cont'd

Discouraging unnecessary idling by taxis, coaches and other vehicles.



Description of actions	Evidence and KPIs	Responsibility	Magnitude of benefit	Date

Action 21

Temporary car free days.



Description of actions	Evidence and KPIs	Responsibility	Magnitude of benefit	Date
Work with BIDs to support a suitable programme of weekend road closures to allow town centres and high streets to be used in new and innovative ways, supporting vibrant town centres and communities.	Programme to be produced by April 2021 - Output - Closures applied.	Traffic and Road Safety		April 2021

Magnitude of Benefit



High



Medium



Low

Action 21 - cont'd
Temporary car free days.



Description of actions	Evidence and KPIs	Responsibility	Magnitude of benefit	Date
Continue with Play Street events and engage with residents in discussions about possible changes in the locality that would enhance walking and cycling.	<p>No of events held over period of plan.</p> <p>Produce baseline for 2021 and target increase 5% per annum.</p>	Public Health and Traffic and Road Safety		Ongoing



Magnitude of Benefit



High



Medium



Low

Action 22

Using parking policy to reduce pollution emissions.



Description of actions	Evidence and KPIs	Responsibility	Magnitude of benefit	Date
<p>The use of electric vehicles will be promoted by providing the appropriate infrastructure. There are national policies in place to influence road users' choice of vehicle, but parking policy is not considered to have an impact on the use of those vehicles. * As even EVs will emit pollutants in the form of Particulate Matter via brake and tyre debris and road wear and tear. The borough's priority will be to encourage active travel where this can be a genuine option for the user.</p>	<p>Events and promotion.</p> <p>Target: Produce plan for pocket parks to utilise road space by end of 2021 for introduction in 2022.</p>	<p>Parking</p>		<p>Plan December 2021</p> <p>Implementation December 2022</p>

Magnitude of Benefit



High



Medium



Low

Action 23

Installation of Ultra-low Emission Vehicle (ULEV) infrastructure such as electric vehicle charging points, rapid electric vehicle charging points and hydrogen refuelling stations.



Description of actions	Evidence and KPIs	Responsibility	Magnitude of benefit	Date
Work with Bluepoint London to continue to roll out electric vehicle charging infrastructure. *There are national policies in place to influence road users' choice of vehicle, but parking policy is not considered to have an impact on the use of those vehicles.	Maintain membership of the Source London network and expansion of the infrastructure.	Traffic and Road Safety		Ongoing
Install 4 Rapid Charge Points as part of the TFL scheme by March 2020 along with the 4 installed on the A232 TLRN in Coney Hall and West Wickham.	Target - Installation of 4 rapid charging points. The Council will continue to work closely with TfL and private sector partners to improve the provision of charging equipment in key locations where our own funding is compromised.	Traffic and Road Safety		March 2020
Policy 30 of the Local Plan requires 1 in 5 car parking spaces to be provided with electric vehicle charge points.	Application of the plan. Output - developments subject to the requirement. Target: 1 in 5 car parking spaces in Bromley to be provided with chargers.	Planning		To be applied to all developments - Ongoing throughout the plan
Implementation of a pilot for lamp post charging points, including £30K LIP investment match funded by GULCS.	Outcome of pilot. Target: Report published.	Traffic and Road Safety		December 2021

Magnitude of Benefit



High



Medium



Low

Action 24

Provision of infrastructure to support walking and cycling and encourage mode shift away from private vehicle usage



Description of actions	Evidence and KPIs	Responsibility	Magnitude of benefit	Date
Development of new cycle routes, both as part of TfL's strategic cycle network and local routes.	Outcome 1 of Bromley's LIP3.	Traffic and Road Safety		Ongoing throughout the plan
Delivery of the 'Shortlands Friendly Village Scheme' to include schemes to reduce traffic volumes on residential streets to facilitate a safer and more inviting environment for walking and cycling.	Scheme delivered.	Traffic and Road Safety		To commence in November 2020
Delivery of are- based schemes that promote walking and reduce road danger, including a new footpath to Valley Primary School, a parallel zebra crossing outside Bishop Challoner School and a segregated cycle route in Albermarle Road and Beckenham Road to connect Shortlands with Beckenham, plus a cycle route in Valley Road to Harris Primary.	Schemes delivered by 2025. Reported annually.	Traffic and Road Safety		By end of plan 2025
Improve pedestrian safety - installation of new pedestrian crossings.	Number of crossings installed. Produce baseline for 2020 and to establish an appropriate target for annual improvement.	Traffic and Road Safety		Ongoing

Magnitude of Benefit



High



Medium



Low

Action 24 - cont'd

Provision of infrastructure to support walking and cycling and encourage mode shift away from private vehicle usage



Description of actions	Evidence and KPIs	Responsibility	Magnitude of benefit	Date
Improve pedestrian infrastructure to encourage walking to school.	<p>Infrastructure improved.</p> <p>Target: As a minimum, improvements to footways and crossings to benefit 5 Primary schools and 1 Secondary School by April 2023.</p>	Traffic and Road Safety		April 2023
Provide high quality cycle hubs at stations and continue to deliver on-street cycle parking and Bike hangers.	<p>Hubs installed.</p> <p>Target: Minimum of three installation by end of 2021.</p>	Traffic and Road Safety		December 2021



Magnitude of Benefit



High



Medium



Low

Theme 5

Localised solutions

Action 25

Expanding and improving green infrastructure.



Description of actions	Evidence and KPIs	Responsibility	Magnitude of benefit	Date
Through Planning process, identify opportunities for green infrastructure.	Planning conditions applied & applicant plans provided. Target 100% relevant applications.	Planning		Ongoing

Action 26

Maintain and increase Council's green infrastructure.



Description of actions	Evidence and KPIs	Responsibility	Magnitude of benefit	Date
Continue to provide an annual tree planting plan and where possible consider planting trees in areas where they will be of most benefit to local air quality. Progress a scheme to create/ expand woodlands in the Borough.	Tree planting plan produced annually. Target: As a minimum achieves a net gain in retained trees. 191 further trees to be planted by end of 2020.	Neighbourhood Management		Annually and first stage December 2021

Magnitude of Benefit



High



Medium



Low

Action 26 - cont'd

Maintain and increase Council's green infrastructure.



Description of actions	Evidence and KPIs	Responsibility	Magnitude of benefit	Date

Action 27

Low Emission Neighbourhoods (LENs).



Description of actions	Evidence and KPIs	Responsibility	Magnitude of benefit	Date
Re-submit previously unsuccessful bid to the Mayor's Air Quality Fund for a Low Emission Neighbourhood in Birkbeck village in Bromley's AQMA, which is bounded by the A213 and A214 *Options are being considered for how the benefits of the scheme can be derived without LEN funding.	Rework and resubmit bid.	Traffic and Road Safety		December 2021
Feasibility study for enhancing the public realm potentially through gyratory removal at Elmers End (see also 26).	Future LEN bid when resources allow.	Traffic and Road Safety		December 2021

Magnitude of Benefit



High



Medium



Low

Action 27A

Provide waste and recycling collections specifically to reduce need for residents to make trips to Council Household Reuse and Recycling Centres.



Description of actions	Evidence and KPIs	Responsibility	Magnitude of benefit	Date
Continue to provide existing comprehensive waste and recycling collection service.	Ongoing provision of the collection service.	Neighbourhood Management		Ongoing

Action 27B

Reduce the Council's Environmental Services contractors transport to work emissions.



Description of actions	Evidence and KPIs	Responsibility	Magnitude of benefit	Date
Provide a kerbside collection service for textiles, batteries and small electrical items*The Council provides a collection service for the Core Materials as required within the London Environment Strategy.	Ongoing provision.	Neighbourhood Management		December 2021
Liaise with Council's contractor to expand on materials accepted at the kerbside and promote the Council's chargeable garden waste service.	Ongoing dialogue.	Neighbourhood Management		Ongoing

Magnitude of Benefit



High



Medium



Low

Action 27C

Minimise dust generation at Council's Waste Transfer Stations.



Description of actions	Evidence and KPIs	Responsibility	Magnitude of benefit	Date
Promote dust management at sites – using the accordance with the Mayor of London SPG as an exemplar.	Target 100% annual audits undertaken/ advice given/actions uptake.	Neighbourhood Management		Annually

Action 27D

Reduce emissions from closed landfill site.



Description of actions	Evidence and KPIs	Responsibility	Magnitude of benefit	Date
Monitor and manage landfill gas generated by closed landfill site through existing network of pipes and landfill gas flare.	Target 100% monitoring undertaken on relevant sites.	Neighbourhood Management		Annually

Magnitude of Benefit



High



Medium



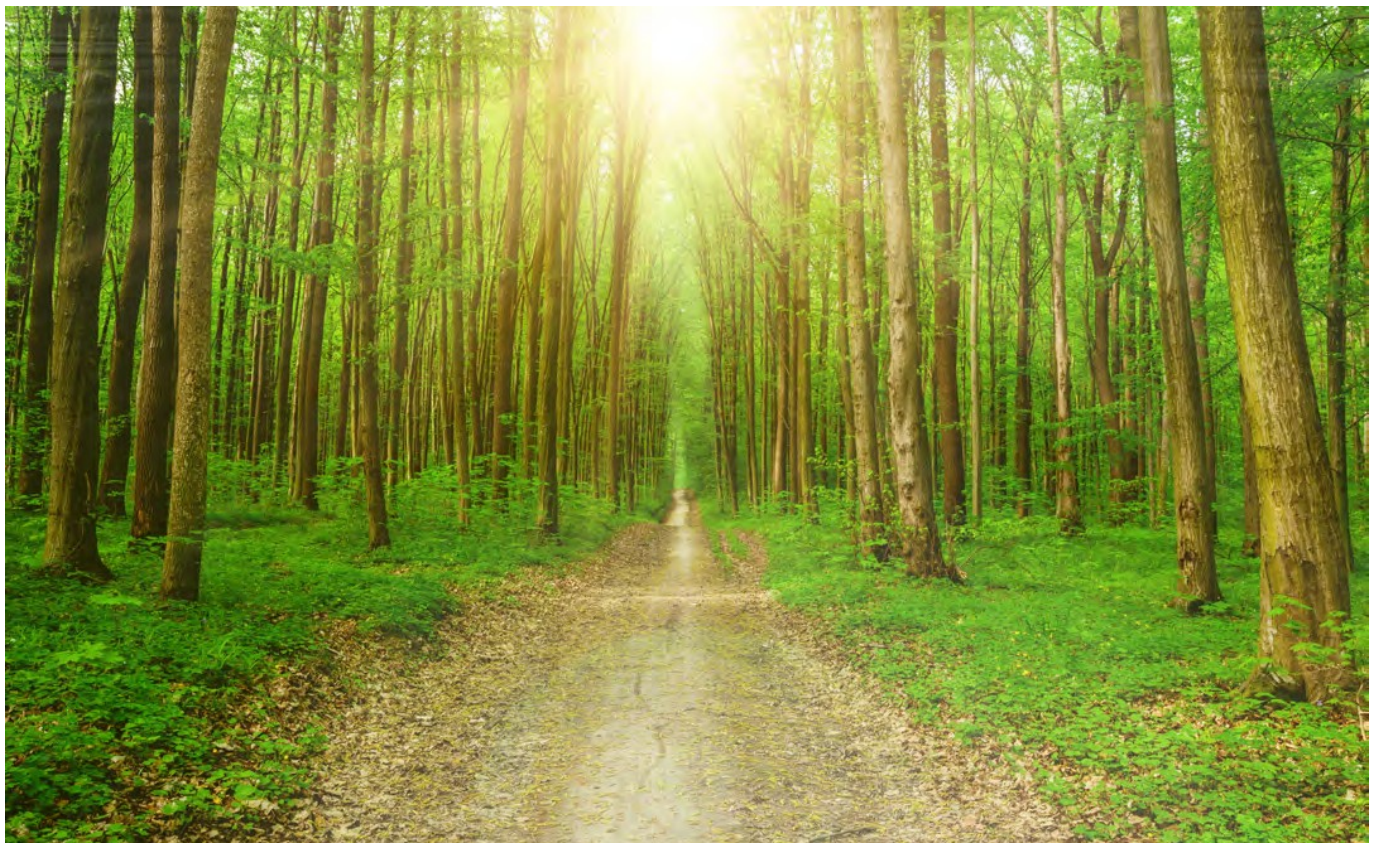
Low

Action 27E

Reduce arboriculture haulage movements.



Description of actions	Evidence and KPIs	Responsibility	Magnitude of benefit	Date
<p>Install wood chip bins within the borough's parks instead of transporting woodchip outside the borough. *Parks Contractor will be able to use woodchip for bedding, path creation rather than woodchip being used as biomass.</p>	<p>Installation of the bins - Target all parks to have bins by December 2021.</p>	<p>Neighbourhood Management</p>		<p>December 2021</p>



Magnitude of Benefit



High



Medium



Low

Consultation

Following the approval for consultation of the draft AQAP in March 2020, a consultation was undertaken for 6 weeks between 25 June and 10 August 2020.

Who we consulted with

Bromley Council services

The draft consultation version of the AQAP had internal consultation from the action plan delivery service areas as it was being developed. The service areas were re-engaged once the public consultation had concluded so that specific comments raised can be addressed and any necessary changes to be made.

This included the following teams:

- ◆ Environmental Protection
- ◆ Environment and Leisure Services
- ◆ Communications
- ◆ Public Health
- ◆ Transport Policy
- ◆ Sustainable Travel and Road Safety
- ◆ Procurement
- ◆ Facilities Management
- ◆ Fleet Services
- ◆ Housing
- ◆ Development Management
- ◆ Planning Policy
- ◆ Noise and Nuisance Service
- ◆ Joint Enforcement

External organisations

It is a legal duty under the Environment Act 1995 and the London Local Air Quality Management Framework to consult specific agencies during the development of any air quality strategies and action plans. Therefore, we consulted with the following agencies:

- ♦ Greater London Authority (GLA) - response received
- ♦ The Secretary of State - no response received
- ♦ The Environment Agency - no response received
- ♦ Transport for London - no response received
- ♦ All neighbouring boroughs and/or neighbouring district and county councils - no response received
- ♦ Other public authorities as the borough considers appropriate - no response received
- ♦ Bodies representing local business interests and other persons/organisations as considered appropriate - no response received

What people told us

Feedback from the GLA

The GLA responded that the AQAP was well written, very well laid out, informative and contained lots of good actions. Notwithstanding this, they provided constructive comments for improvement prior to formal approval being given. These include:

- ♦ Additional details for some actions
- ♦ Deadlines for actions to be included
- ♦ Targets and KPIs for actions to be included
- ♦ Firmer/clearer commitments required for some actions, such as around the Council fleet

These comments were circulated to all internal partners for their response and suggested amendments. These were then collated, together with those provided by the public, and the revised version containing the suggested amendments was sent back to the GLA who provided their approval.

Feedback from our residents

We had 869 responses from our residents and local organisations. 826 of these were received via the online survey.

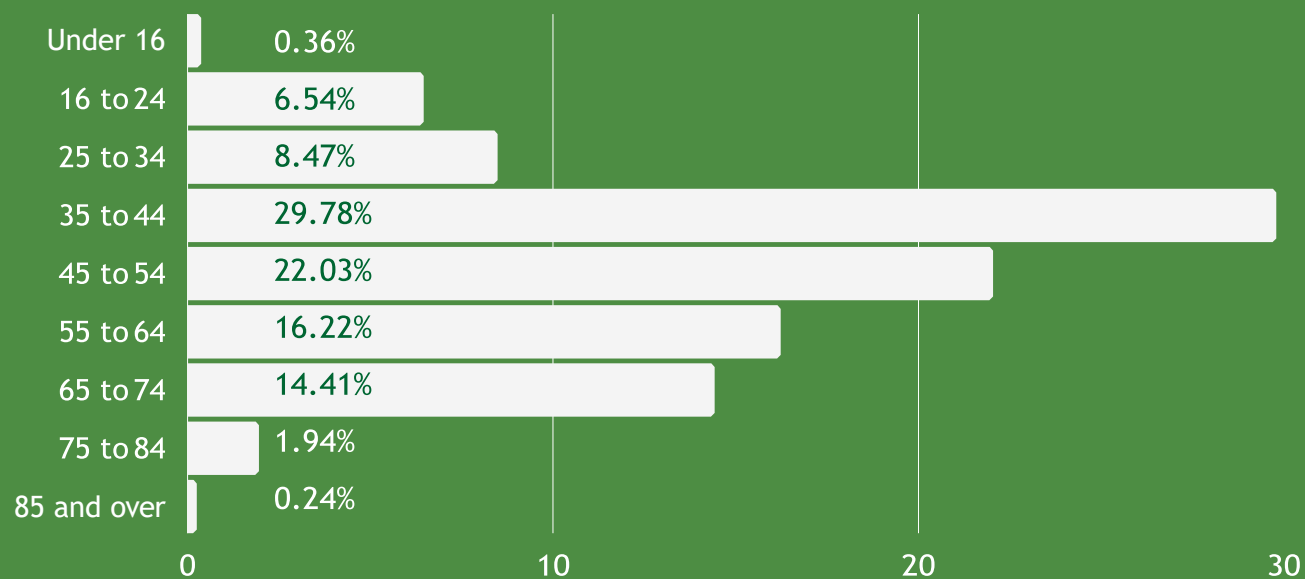
The following local organisations and groups made comments in their responses:

- 5th Bromley Scout Group
- Barnmead Road Allotments Committee
- Birkbeck Community Initiative
- Bob Neill MP
- Bromley Green Party
- Bromley Liberal Democrats
- Bromley Living Streets
- Bromley Youth Striker 4 Climate
- Bullers Wood School for Girls PTA
- Chislehurst and St Paul's Cray Commons Conservators
- Chislehurst Eco Community
- English Heritage
- Environmental Action Coney Hall
- Friends of Cator Park and Alexandra Recreation Ground
- Friends of the Earth Bromley
- Friends of Unicorn Primary School
- Go Green Club
- Greener and Cleaner Bromley and Beyond
- Hayes Primary School PTA
- Kent House Primary Academy PTA
- Keston Mark & Bromley Common Village Residents' Association
- NHS
- Palace Estate Residents Association
- Scotts Park Primary School
- Soroptimists Bromley
- St Mayr's Church – Plaistow Lane
- St Olave's Environmental Society
- The Chislehurst Society
- Valley Primary and Pre-School PTA
- Valley Primary School

The following page provides an overview of who responded. Appendix B provides the most popular suggestions to improve air quality in Bromley divided by themes and a summary of comments that were out of scope.

Who responded

How they defined their age

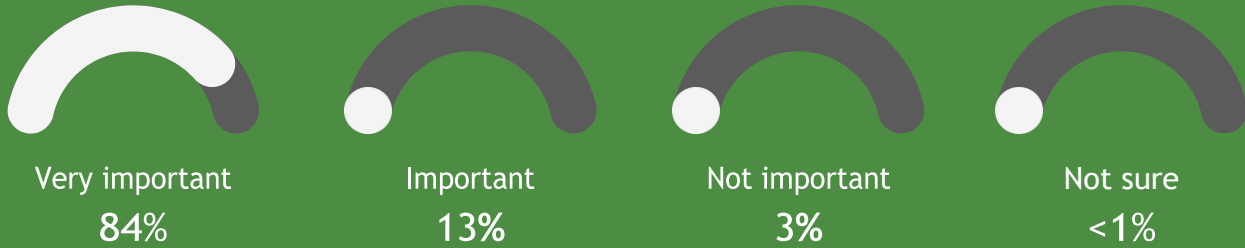


How they described themselves



What they told us

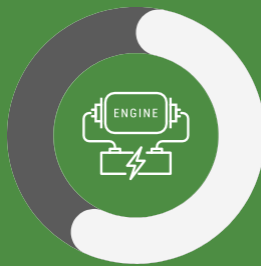
How important do they think air quality issues were?



What things are they already doing to improve air quality?



Use public transport, cycle or walk
84%



Switch off engine in a traffic jam
60%



Live car free
14%



Have an alternative fuel vehicle, such as hybrid or electric
13%



Car share
11%

Do they think the proposals will help air quality in Bromley?



Yes
34%



No
17%



Not sure
49%

Does poor air quality impact on them personally?



Yes
72%



No
13%



Not sure
15%

Further details on the responses can be found at
www.bromley.gov.uk/airquality

Summary of responses: by theme

You were asked for your comments in relation to the proposal and what other measures you would recommend. All comments have been read and the key themes and points have been identified, summarised and are responded to below. Where appropriate to do, so the Plan has also been revised to reflect the feedback.

Theme 1: Monitoring and data

“ It is not clear where the data comes from, graphics do not have sources and LAEI data is superseded

Response:

The data is drawn from supporting empirical data sources, and links to these sources have now been included in the AQAP. The GLA approved the Council using the LAEI 2013, as this data set provided a bespoke modelling package to boroughs that predicted the levels of pollutants for 2020. The LAEI 2016 data has now been referenced and we will include LAEI 2019 future projections when made available by the GLA.

“ There is a lack of actual data being used from monitoring stations...we need more of them

Response:

All monitoring stations within London feed into the LLAQN network and the subsequent model. Based on actual monitoring London wide, a high degree of confidence can be had in the modelled data. Modelling has been widely used for many years and is very useful in predicting future trends. All data is subject to third party accreditation and modelled in accordance with guidance. This includes data from NO_x tubes as well as from real time analysis. Monitoring spend does not have a direct impact on improvement in air quality.

This site of the current real time monitor was chosen to reflect a typical background location to provide trend data, and funding is being sought.

The Council is increasing its passive monitoring sites, and is installing an additional 20 NO_x tubes near to sensitive receptors, this will bring the total of locations of passive monitoring up to 30. The data from these tubes is submitted alongside the data from the real time monitor to add further to the Council's ability to monitor air quality.

“ Some people feel as though the Council is hiding urban issues by distorting models/data

Response:

The modelled data is very sophisticated and covers the whole of London and the data used to supply this study is verified by independent scrutiny. The extension of the AQMA and AQFA's demonstrate that Air Quality is considered on an area basis.

“ Why aren't figures based on 24hr mean as well as annual means, as the annual mean is not a true reflection

Response:

All figures and their averages are based on Government published guidelines, and all data is approved by Kings College University. However real-time is undertaken at the Harwood Avenue monitoring station, this includes hourly, weekly, quarterly and annual means are recorded. These reports can be viewed online [here](#)

“ Bromley claims to meet all national indicators, this is false as PM2.5 has not been monitored for over 7 years

Response:

PM2.5 has been added to the monitoring requirements in recent times due to concerns about the pollutant. Notwithstanding this, the modelled LAEI data shows that this index should be met in 2020, as does the 2018 modelled data for DEFRA. Indeed, DEFRA's indicates that Bromley has lower levels than most London Authorities and is close to the lower WHO guideline level for this pollutant.

Although the GLA have already approved this plan, we have asked that this point be clarified by the GLA, and will rectify the report if necessary.

“ We think more research should be undertaken on the impacts of air quality

Response:

The guidance for producing the AQAP has been followed, and Public Health are fully conversant with the impact poor air quality has on health. Their views have been incorporated into the actions within the matrix. Any new findings from future independent research will be taken into account.

“ Why have you stopped monitoring Benzene, 3-Butadiene, Carbon monoxide, Lead and Sulphur Dioxide? These levels may be low now, but they could rise

Response:

The objectives for these pollutants have been met for several years and are well below the air quality objectives, as such the GLA do not expect London Authorities to report on these pollutants.

“ We think that Bromley should coordinate with neighbouring Boroughs

Response:

Bromley is part of the South West London Air Quality Cluster Group. All neighbouring authorities were invited to take part in the consultation. Coordination is also undertaken through national UK strategy.

“ We ask that the Council commit to a mid-plan progress report in 2022/23

Response:

Progress is reported through the Annual Status Report (ASR).

“ Is Bromley's AQAP compliant with the legal framework on what should be included, and what pollutants should be measured?

Response:

The GLA have endorsed the AQAP and associated matrix. Bromley is compliant with the legal framework.

“ We think that Bromley is shifting the blame of poor air quality to inner London boroughs

Response:

Air pollution by nature is transient, and the verified data collated by the GLA is used to determine the source of pollutants. It is clear from that data, and the maps provided by the LAEI, that inner London is one of the main sources of transboundary pollution.

“ There is a lack of confidence in Harwood monitoring station as it malfunctions sometimes, and we think the location is wrong

Response:

The location was chosen historically based on scientific/specialist advice and screening/monitoring data available at the time of procurement. This site provides us with the ability to compare long term trends over time. As we are a member of the LAQM network, they provide additional data scrutiny, and they also publish data in real time.

In addition, all data is also subject to independent audit, and the facility itself is audited, and a new maintenance and servicing plan has recently been implemented by an accredited engineering company. Having said that, no equipment is infallible, and on the occasions a malfunction occurs, it is addressed and rectified as soon as possible.

Bromley Council data is highly comparative with our neighbouring boroughs, and the servicing plan above is making a positive difference.

Notwithstanding malfunctions, all analysers will have missing data as they all need periodic calibration and maintenance. The data ratification process takes this into account and, where there has been significant data loss, it switches to an annualisation calculation to provide an indicative value for annual average pollutant concentrations.

The most noticeable recent problem pertains to the newly installed PM2.5 monitor, which has experienced teething problems, and these are being addressed.

The data above is reported within Bromley's ASRs.

Theme 2: Transport and travel

“ Why don't you introduce congestion charge to Bromley?

Response:

TFL operate this scheme; there is no indication that it will be applied in Bromley.

“ Introduce 20mph speed limits

Response:

This is not Council Policy and is not currently under consideration.

“ Discourage use of cars and reduce number of cars and provide alternative forms of transport

Response:

This is already within the matrix as a result of encouraging modal shift, such as cycling, the use of public transport and walking. This is also a key thrust of the MTS and the Council's own Transport Strategy.

National Government is currently trialling the use of e-Scooters and Bromley is engaged in a watching role and will help facilitate their use if they prove to be safe.

“ Why aren't motorcycles are not mentioned in the plan?

Response:

Whilst motorcycles also cause pollution and do not promote active travel they are very low contributors to air pollution as shown through source apportionment work thus they do not feature in the plan.

“ Why don't the Council introduce more places to park as to stop cars circling and wasting petrol?

Response:

This would simply encourage more car trips and waste precious land and would have the opposite effect of improving the environment, air quality and personal health. Even prior to the pandemic the main centres of Bromley, Orpington, West Wickham, etc., have parking supply that exceeds demand.

“ Will the Council provide park and ride facilities?

Response:

The Councils strategy is to improve all modes of transport, and encourage modal shift as far as is possible to reduce car journeys. Park and ride has been provided in previous years prior to Christmas, with only very limited take-up.

“ Why doesn't the Council ban diesel ice cream vans?

Response:

The Council has investigated powers to prevent the use of polluting ice cream vans, but the national powers are not adequate to enforce this. Further it would not be appropriate to single out any one type of business.

“ Could the Council consider removing parking spaces along congested roads to improve flow of vehicles

Response:

This is dependent on location. The more northerly parts of the Borough have properties that lack off-street parking, so those residents have no alternative. Whilst flow may improve as a result of those actions traffic speed often increases which risks creating a new safety problem. On- street parking can be a deterrent for use by through traffic also helping make the respective neighbourhoods safer.

“ Change phasing of lights to stop idling cars

Response:

The traffic flow through the borough is subject to modelling which is used to maximise flow and reduce idling and congestion. TfL, who manage traffic signals across London review junction performance to ensure that they are all running as efficiently as possible, thereby minimising delays, queues and idling.

“ We want the Council to make clear which A-roads they have responsibility over

Response:

Maps are available to show the roads which are not under Council control - namely the A21 and much of the A232.

“ Why don't Bromley have low traffic neighbourhoods?

Response:

Prior to the suspension of funding from TfL such objectives featured in the aspirations of the MTS and Bromley's own Transport Strategy, although emergency funds for social distancing in relation to Coronavirus has enabled some of that philosophy to be achieved.

“ Why don't you introduce higher parking tariffs?

Response:

Parking tariffs were increased in 2019, but these will only be increased further as genuine alternatives are developed, otherwise the higher charges become nothing more than a tax. Also, when considering charges, this must be balanced against local business need to prevent traders being adversely affected. Further, not all car parks are within the Councils control.

“ We should introduce more speed cameras in the borough

Response:

The placing of speed cameras is under the jurisdiction in London of TfL and the Police. There is strict criteria that is considered for their installation, this includes having regard to for their installation, this includes the number of serious speed related collisions at any location. As such, speed cameras are more aligned with road safety.

“ We would like to see more electric/hybrid buses, and want to know what you do when buses are idling?

Response:

Whilst TfL are responsible for all local bus services across Greater London, Bromley has been fully supportive of these proposals, helping identify land that might be used for bus charging facilities. TfL have already embarked on an extensive programme of rolling out hybrid and all electric buses, e.g. Service 320, Catford – Biggin Hill. However, this rollout has been paused due to the Coronavirus pandemic.

Where enforcement Officers see buses idling, they will be asked to switch their engines off, if drivers do not comply they may be issued with a PCN.

“ We want more charging points for electric vehicles

Response:

Bromley has a number of charging points and the Council engages with OLEV on a regular basis. We work in partnership with Bluepoint London and charging points have been implemented across the Borough since 2016; this is a clear Outcome of the Borough's Transport Strategy.

“ Why don't you increase the number of people who use buses, and reduce the number of bus routes, by diverging to other roads?

Response:

The routing of buses is the remit of TfL, and the measure suggested would not necessarily increase bus usage.

“ We think cut through roads should be reduced

Response:

This is considered on a case-by-case basis when a positive outcome will result; as to do otherwise simply shifts a problem to another location.

“ Why don't you remove parking spaces along congested roads to improve flow of vehicles?

Response:

This option is location dependant. The more northerly parts of the Borough have properties that lack off-street parking, so those residents have no alternative but to park their vehicles on the road. Moreover, whilst flow may improve as a result of those actions, traffic speed often increases, which risks creating a new safety problem. Additionally, on-street parking can be a deterrent for use by through traffic also helping make the respective neighbourhoods safer.

“ Why don't you introduce more places to park, as this would to stop cars circling and wasting petrol?

Response:

This measure would simply encourage more car trips, and would have the opposite effect of improving the environment, air quality and personal health. Even prior to the pandemic the main centres of Bromley, Orpington, West Wickham, etc., have parking supply that exceeds demand.

“ Why don't you stop Council employees driving to work?

Response:

Parking for Council employees is status based depending on the requirement of a vehicle for their role. Many officers need to respond to service requests in real-time, and also work unsocial hours.

“ We'd like more segregated cycle lanes introduced, and for you to prevent parking in cycle lanes

Response:

This is part of the national cycling strategy supported by Bromley Council; new cycle routes are planned for delivery in 2020/21 in Albemarle Road, Beckenham Road, Crofton Road and Kangley Bridge Road.

Improved cycling facilities are another key outcome of the MTS and Borough Transport Strategy, and this year a key new cycle and pedestrian route in Crofton Road, Orpington will be introduced. This will provide a high quality, dedicated route to the station, and will also result in new verges, rain gardens and significant tree planting to enhance the greening of this important corridor.

In addition to the above, more segregated cycle routes are being installed or developed.

Parking in cycle lanes is enforced by the Council's own Civil Enforcement Officers, where the road is a Borough road or part of the TLRN, and when parking restrictions are in place.

“ Why doesn't the Council provide showering facilities at work, so more people can cycle to work?

Response:

There are facilities for staff to shower at the London Borough of Bromley.

“ Why doesn't the Council increase cycle routes and promote car sharing/pooling?

Response:

Cycle routes around Shortlands are being developed, this is one of a number of sustainable measures (including the promotion of car-pooling) that has been supported by the Council through its own Staff Travel Plan and has offered support to local employers to set up similar approaches.

“ Bromley should follow example of Walthamstow to create mini Hollands

Response:

The desire to provide more better quality cycle facilities is a key objective of the MTS and the Borough's Transport Strategy and, if appropriate, the Council would be happy to consider their use. Shared spaces to manage vehicle and pedestrian conflict are also more aligned to road safety.

““ We think the existing cycle scheme should be extended for younger children

Response:

Family training is provided, and younger children are included as part of this. There are no plans to extend this scheme further at the moment.

““ The Chislehurst society is willing to contribute financially towards traffic modelling, cycle route planning and electric charging points for Chislehurst

Response:

This may be considered once an acceptable design has been provisionally agreed.

““ There should be a safe pedestrian crossing at Chislehurst War Memorial

Response:

The Council is seeking a design that will accommodate a crossing without causing congestion, that would lead to additional "rat running" in nearby residential streets and past nearby schools.

““ Why aren't there bike hire stations?

Response:

Bromley Council supports all forms of model transport shift and will continue to work with public bike hire schemes. Bike hire has been trialled in the Borough (Lime e-Bikes); however, the trial is currently suspended.

““ The Council should promote car share schemes and clubs like Zipcar

Response:

This will be given consideration.

““ Idling traffic at junction A234 and Kent House Road/Royston remains a serious concern, can't you do something about this and encourage people to buy stop/start vehicles?

Response:

The Council cannot influence drivers in queuing traffic to turn off engines or to purchase stop/start vehicles.

Theme 3: Parks, verges and highways

“ Why doesn't the Council change the policy on regular grass verge cutting to once or twice a year? And, not undertake mowing when dry and also use a cylinder mower with a higher cut level?

Response:

The Council has already implemented a cylinder mowing regime for all of its parks and open spaces. In accordance with horticultural best practise the height of cut is gradually lowered at the start of the cutting season and raised again towards the end of the season. Initially the length of the grass on completion of a cut was at 25mm, but these are now managed closer to 50mm for both operational and environmental reasons.

During very dry conditions cutting frequencies are suspended or reduced where that is not possible. As part of the Council's Draft Parks and Open Space Strategy, the Council is looking to adopt maintenance regimes that better support biodiversity, ecology and sustainability. As part of this exercise, and subject to Health and Safety criteria, the council will identify verges for repurposing. This repurposing programme would potentially result in some verges receiving a bi-annual maintenance regime.

Grass verges are still cut using a rotary mower regime, as the coarse verges would have a detrimental effect on cylinder mowers, moreover, these mowers are more tolerant to debris like stones and sticks. In addition, comparatively, the productivity rates are more efficient using the rotary mower on verges, and this brings its own environmental benefits. Finally, the rotary mower regime is more versatile and cost effective.

“ Can the Council cease the use of mechanical leaf blowers on hard surfaces?

Response:

The Council is considering alternatives to blowers as method of cleaning.

“ Mechanical suction sweepers sometimes run out of water but the operator continues to use them and causes lots of dust

Response:

Mechanical suction sweepers should not be operated without water. The Council will ask the Street Environment Contractor to address this through training with their staff. If residents have any specific incidences where this occurs, please contact the council with details.

“ We want more residential roads to have a 7.5 tonne limit, and for HGV’s to be restricted to main thoroughfares, and not allow rat runs to occur

Response:

Weight restriction orders are intended to protect old or weak bridges and structures, or bar heavy vehicles from areas unsuitable for their size or if they pose a danger, for example narrow roads, as such this issue pertains to safety rather than air quality. Notwithstanding this, there is no duty placed on the Council to enforce this legislation pertaining to this issue, and currently enforcement is with the Police.

“ Why don’t the Council plant more trees, or plant wildflowers and greenery, including on grass verges to absorb pollutants?

Response:

The Council operates an annual tree establishment programme for highways, parks and woodland sites. Over the past ten years we have achieved a net gain in the number of trees retained within the borough. Tree establishment is not limited to simply planting trees, they require maintenance. Along with budgetary limitations the logistical ability to maintain young trees as they establish is a sensible limiting factor in the total number of trees planted each year. The Council are currently progressing a scheme to create/expand woodlands in the borough which if successful, will substantially increase the number of trees growing within the borough.

With 7,000 acres of green space, Bromley is one of the greenest boroughs in London, and the Council continues to maintain greenery and wildflowers in its green spaces. Many of the real benefits from trees include particulate capture and CO₂ sequestration. The Council proactively plants tree species which trap particulates in their bark removing them from the air, however, when the long-term viability of tree planting is considered, these species are not suitable for every location, which is critical in allowing trees to develop into maturity.

The Council organises for the planting of wildflowers on some grass verges across the borough. The Council’s ability to extend this will be determined by its financial position.

Theme 4: Housing

“ Why don't you invest in home insulation to cut emissions?

Response:

The Fuel Poverty work stream can assist in referring viable candidates to the right national and regional work schemes. We cannot currently pay for these ourselves as it would be cost prohibitive to provide such a scheme for all homes. The council is instead looking at a programme for upgrades to schools, this allows for a public collective benefit of expenditure, and this is a fairer process than selecting individual households.

Theme 5: Planning

“ We want the Council to prevent paving of green verges and gardens

Response:

This has been addressed within the Council's Local Plan Policies, and it is covered through street parking audits undertaken by the Highways Team. Development on Garden Land is assessed against Policy 3 of the Bromley Local Plan. In the many cases, existing houses will have permitted development rights to install hard surfaces, subject to conditions (see Class F, Part 1 of Schedule 2 to of the General Permitted Development Order). This subject is also covered by the National Planning Policy Framework.

“ Why don't you limit car use in planning applications?

Response:

This is covered on a case-by-case basis through the planning application process. Local Plan Policy 31 requires any new development likely to be a significant generator of travel to encourage walking and cycling through the provision of appropriate facilities. Parking levels are assessed against relevant Local Plan and London Plan standards on individual planning applications.

“ More solar alternatives in developments should be used

Response:

Local Plan Policy 124 requires the potential for renewable energy to be assessed as part of the design of new major development, in meeting carbon reduction targets on site. All major developments are required to follow the Lean/Clean/Green GLA energy hierarchy, we cannot promote solar PV usage where it is not appropriate to do so.

The council also looks for any ways it can increase efficiencies and performance including renewable energy such a power to CCTV units.

“ Why don't you include landscaping as a planning condition?

Response:

Where appropriate to the scale of development, landscaping schemes are sought by planning condition on relevant planning permissions.

“ Construction Environmental Management Plans (CEMP) should be required for all sites, not just those that are considered to be major

Response:

CEMPs are required for Major Planning Applications, either at application stage or to be secured by planning condition. This is regulated by Planning Policy and measures required must be necessary and proportionate to the proposed development, as such, it cannot be automatically applied to all development.

“ We don't want the Council to build any additional office blocks, as there is already a lot of empty office space in the borough

Response:

Bromley's Local Plan was adopted on 16 January 2019 and, in conjunction with the London Plan it is used to determine planning applications. When an application has been received by the local planning authority it is published and there is an opportunity for representations (either for or against) to be made on a proposal.

Whilst we will take account of all representations received, it must be remembered that the planning process is in place to ensure that, in the development of land or buildings, the public interest is taken fully into account. Whenever we receive representations to a proposal, we will consider them fully which may result in an amendment to the proposal.

“ Can the Council ban all dry cutting of masonry?

Response:

This issue covered within Construction Management Plans through the planning system.

“ Why hasn't an action been included to ensure that ultra-low NOx boilers are used?

Response:

This action is included within the action plan under action 4 and is required where appropriate through the planning system.

Theme 6: Schools

“ Why don't you provide low-cost air quality monitors for schools?

Response:

The Council's monitoring is designed to look at air pollution in sensitive locations, and this includes schools as required by the guidance. Action point 1 includes a commitment to reviewing existing and emerging technology. This information can be shared with schools, however at present that data suggests that expenditure in this area would be disproportionate. In addition, the data that is used to inform the modelling needs to be independently verified, and individual monitoring stations would not be part of this scope.

“ We would like the Council to extend green screen testing for schools

Response:

The benefits of this are being trialled, it would not be appropriate to commit to extending such a project prior to the outcome of the initiative at Valley Primary School.

“ The school curriculum should be more creative and educate children on the topic

Response:

We work with schools through our Healthy Schools Programme, and this covers various aspects of healthy lifestyle.

The Carbon Management Team are looking into setting up a partnership to provide material to primary schools free of charge to learn more about sustainability, including air quality. We plan to start with 10 schools for one academic year to trial the initiative. In addition, the Council will be helping deliver a junior citizen program in future years where this subject is hoped to feature.

“ The actions listed in action numbers 14 and 25 are likely not to achieve anything. Instead more commitment to school streets and low traffic neighbourhoods may be beneficial.

Response:

All actions to improve air quality are valid. School Streets is an interesting idea and partner schools will be spoken to during the life of the plan. The actions included in the plan have been chosen because they are likely to have the most effect, and link to other partner's actions.

“ We would like roads next to schools closed to cars during drop-off and pick-up

Response:

Temporary school streets are being implemented at a number of schools this September.

“ We would like anti-idling literature and campaigns for schools

Response:

The Borough was due to commence an anti-idling campaign outside schools in April. This was delayed by lockdown and will now commence in the Autumn, and appropriate literature will be distributed.

“ We would like double yellow lines and zig zag near schools to avoid dangerous parking and idling

Response:

Such measures are constantly reviewed as part of the school travel plan process.

“ Theme 3 action 13 does not quantify how many Gold, Silver and Bronze accreditations should be achieved to constitute success

Response:

The matrix states that currently 76% of schools have active travel plans, and the target seeks to maintain a level where more than 75% of schools have an active travel plan, with a target score for quality of >180.

Theme 6: Schools

“ We want the Council to encourage retailers to not use un-environmentally friendly practises e.g. leaving doors open in winter, turning lights off after they close

Response:

We will work with our Business Improvement District leaders to reach out to commercial properties and retailers for promote behavioural changes that result in energy reductions e.g. turning off lights after close, keeping doors closed in winter. We will make the benefits of this approach (such as reduced energy bills) apparent to our businesses.

“ We would like the Council to support zero waste shops and their use

Response:

Waste minimisation is a priority for the Council, and we will consider how to promote the use of Zero Wasteshops.

“ Why is the Council not aiming for PM 2.5 levels to be below 10?

Response:

The Council has committed to try and achieve the levels set by the WHO for this particulate. However, it should be noted that PM2 is particularly transient and therefore comes from a number of sources outside of the Councils control.

“ Why doesn't the Council ban bonfires and wood burners, and inform people on the health risks associated with bonfires and make bonfires easier to report?

Response:

Wood burning stoves and their fuels are subject to new national controls to deal with this problem. There is no byelaw pertaining to bonfires in this borough. New model byelaws were introduced by Government in 2013, and the set that pertains to nuisance is the Good Rule and Government model byelaw set 8.

Section 235 of the Local Government Act 1972 enables district and borough councils to make byelaws for the good rule and government of the whole or any part of the district or borough and for the prevention and suppression of nuisances. However, the law is explicit in that byelaws cannot be made under this section if provision for the purpose in question is made, or may be made, under any other enactment. As bonfire/smoke nuisance is covered by the Environmental Protection Act 1990 and the Clean Air Act 1993, and as all new byelaws must be agreed, there is no option to introduce a byelaw under section 235.

With regards to nuisance bonfires, the Council investigates complaints received, provides advice and guidance concerning pollution, and takes enforcement action where appropriate. Bonfires can be reported through the Borough's website and Contact Centre, the Council's web site is currently being improved and new forms for reporting complaints will be developed as a part of that work.

“ We would like to Council to stop any further expansion of Biggin Hill Airport, as the cars and traffic cause pollution

Response:

Air pollution from Biggin Hill due to flights does not significantly affect air quality in Bromley, and surface access traffic is subject to planning control and would be covered through that route if any expansion plan was submitted.

“ The Council needs to place a limit on flights and emissions from Biggin Hill, and also divert planes

Response:

Limits are already in place with BHA as per the lease and London Biggin Hill has committed to a lower amount of take-off and landings than permitted. BHA has a long-established history in the borough, its niche business model does not encourage a mass uptake of air travel.

Air pollution from Biggin Hill due to flights does not significantly affect air quality in Bromley, and surface access traffic is subject to planning control and would be covered through that route if any expansion plan was submitted.

“ We think the area around Biggin Hill Airport should be monitored more

Response:

Action point 1 seeks to achieve this through local agreement with the airport.

“ Why is Biggin Hill the main beneficiary of the additional investment for monitoring?

Response:

The Council is not proposing any direct investment to monitor air quality at the airport, however the installation of a monitoring station is being considered by local agreement through the life of the plan.

“ We would like the Council to provide more information and educational literature to residents

Response:

As stated within the action plan, new guidance will be circulated through Council publications and promoted to stakeholders.

“ Air quality isn't bad enough to warrant all this expenditure

Response:

The Council has a legal duty to meet the objectives set in legislation. The Plan represents a proportionate and objective response to air quality as an issue for Bromley as well as meeting statutory requirements.

“ Will Bromley declare a climate emergency and set up a task force with community engagement?

Response:

The Council has closely monitored the situation, and has regard to its own footprint, however, it is not anticipated that a climate emergency will be declared. Having said that Bromley does recognise climate change and has set out an ambitious target of being carbon neutral by 2029. In addition, the Council is currently exploring setting up a green growth recovery board, which will have some relationship with external stakeholders and will, in part, discuss air quality as an issue.

“ Will the Council tackle the dust on station platforms from train brakes?

Response:

The rail industry is undertaking an initial research programme, and this will significantly improve the understanding of rail's overall impact on air quality. Future updates to the Air Quality Strategic Framework will log their progress of this work and highlight new initiatives and targets as the knowledge base grows and the GB rail industry moves forward.

“ Why does the plan has less targets than 2010

Response:

The current action plan is written in accordance with previous plan had additional gases/pollutants included in the remit. Technological advances have removed their presence in concentrations considered harmful, and the need to monitor them has been removed. As a result, the plan has less targets.

“ People believe the plan should commit the Council to meeting the ‘Air quality guideline’

Response:

In 2016 the Mayor of London introduced the London Local Air Quality Management system for London (LLAQM). All boroughs are now required to work in accordance with this new guidance.

Theme 8: Waste

“ The Council should promote Bromley’s green waste collection

Response:

Bromley Council is highly supportive of green waste and recycling and will continue to invest in this area. The Council continues to promote the green garden waste collection service by:

- Advertisement on refuse lorries
- Press releases
- Posters and postcards at the Household Reuse and Recycling Centres
- Website information
- Social media campaigns
- Advertisements in Bromley High Street
- Council newsletters including EnvironmentMatters

“ Why doesn't the Council offer free collection of hazardous or bulky materials e.g. sofas etc. and, why isn't there concession for disabled people for recycling collection

Response:

Household recycling collections are free of charge, however, the Council does set charges for the non-statutory green garden waste and bulky waste collection service. These charges are set at a level that enables the Council to recover the costs of collecting these waste types, and no charge is made for the disposal. There are currently no plans to introduce a concession for these waste services.

“ Waldo Road waste depot should be hosed down to prevent dust from travelling, and the booking system should be kept in place

Response:

There is a dust suppressant system in place at Waldo Road Refuse and Recycling Centre.

The booking system could not be maintained indefinitely, as it would limit the amount of waste the Council is able to collect.

Acronyms

- airTEXT - Air pollution forecasts for Greater London
- AQA - Air Quality Assessment
- AQAP - Air Quality Action Plan
- AQFA - Air Quality Focus Area
- AQLV - Air Quality Limit Values
- AQMA - Air Quality Management Area
- AQMS - Air Quality Monitoring Station
- AQN - Air Quality Network
- AQO - Air Quality Objective
- ASR - Annual Status Report
- BEB - Buildings Emission Benchmark
- CAB - Cleaner Air Borough
- CAZ - Central Activity Zone
- CEMP - Construction Environmental Management Plan
- CEO - Civil Enforcement officer
- CHP - Combined Heat and Power
- CIL - Community Infrastructure Levy
- CLP - Continuous Logistics Plan
- DEFRA - Department for Environment, Food and Rural Affairs
- DES - Driving Efficiently and Safely
- EV - Electric Vehicle
- ECO - Energy Company Obligation
- EFL - Energy Facts Label
- Euro VI - European Emission standard number 6
- FORS - Fleet Operator Recognition Scheme
- FPN - Fixed Penalty Notices
- GLA - Greater London Authority
- GULCS - Go Ultra Low City Scheme
- HEYL - Healthy Early Years London
- HGV - Heavy Goods Vehicle
- JSNA - Joint Strategic Needs Assessment

- LAEI - London Atmospheric Emissions Inventory
- LAQM - Local Air Quality Management
- LAQN - London Air Quality Network
- LB - London Borough
- LEN - Low Emission Neighbourhoods
- LEZ - Low Emission Zones
- LIP - Local Implementation Plan
- LLAQM - London Local Air Quality Management
- NRMM - Non-Road Mobile Machinery
- NO₂ - Nitrogen Dioxide
- NO_x - Nitrogen Oxides
- PCN - Penalty Charge Notice
- PM₁₀ - Particulate matter less than 10 micron in diameter
- PM_{2.5} - Particulate matter less than 2.5 micron in diameter
- RE:FIT - A procurement initiative for public bodies wishing to implement energy efficiency measures and local energy generation projects on their assets
- RE:NEW - The Mayor of London's award-winning programme to help make London's homes more energy efficient.
- SEELS - Salix Energy Efficient Loans
- SCA - Smoke Control Area
- SDP - Strategic Development Plan
- SPG - Supplementary Planning Guide
- TEB - Transport Emissions Benchmark
- TfL - Transport for London
- ULEZ - Ultra Low Emission Zone

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