LONDON BOROUGH OF CROYDON AIR QUALITY DELIVERY PLAN 2024 – 2029

To ADD IMAGE

Foreword from Croydon's Executive Mayor/The Cabinet Member for Streets & Environment and/or the Director of Public Health

"to be inserted following consultation"

Foreword from Croydon's Executive Mayor/The Cabinet Member for Streets & Environment and/or the Director of Public Health

"to be inserted following consultation"

CONTENTS

- 1. Introduction
- 2. What is our approach
- 3. Air Quality Monitoring
- 4. Measuring impact
- 5. Action Plan

1. Introduction

This report outlines the actions that Croydon will deliver between 2024-2029 in order to reduce concentrations of pollution and exposure to pollution; thereby positively impacting on the health and quality of life of residents and visitors to the borough.

It has been developed in recognition of the legal requirement on the local authority to work towards air quality objectives under Part IV of the Environment Act 1995, as amended and relevant regulations made under that part and to meet the requirements of the London Local Air Quality Management statutory process¹.

Progress on Air Quality Action Plan 2017-2022

This Air Quality Delivery Plan (AQDP) has been produced as part of our duty to London Local Air Quality Management. It outlines the action we will take to improve air quality in Croydon between 2024-2029. Amendment to dates has been approved by the GLA.

This delivery plan replaces the previous action plan which ran from 2017-2022. Highlights of successful projects delivered through the last action plan include:

Monitoring and other core statutory duties:

• We have continued to monitor Air Quality and increased the network using lamp post AQ sensors, the majority of which are located in central Croydon. In 2022, the network consisted of 38 sensors.

Cleaner Transport

- Electric Vehicle Charging Points (EVCPs)
 - Croydon had 380 slow/fast public charging points (EVCP) by 2022, mainly installed from 2017 onwards (with some older EVCP removed): approx. 340 through the council, 40 commercial on private land.
- Cleaner Air

¹ LLAQM Policy and Technical Guidance. https://www.london.gov.uk/what-we-do/environment/pollution-and-air-quality/working-boroughs

- Idling Vehicles Multiple spot checks were carried out at bus stands in response to reports and complaints from the public. 5 antiidling events were held outside schools where pupils and volunteers engaged with drivers to raise awareness about the negative impacts of idling vehicles on local air quality
- Public Health and Awareness Raising
 - As part of the Pan London Anti Idling project, AQ workshops were held at 6 primary schools, reaching a total of 895 pupils. In addition, 5 anti-idling events were held outside schools where pupils and volunteers engaged with drivers to raise awareness about the negative impacts of idling vehicles on local air quality. A total of 39 Volunteers took part in this initiative. The Council also made a video promotion for school engagement which was shared via social media.
 - Carried out air quality audits in primary schools located in the worst polluted areas in Croydon. 10 schools were shortlisted following a ranking exercise and a trial audit was carried out.
- Localised Solutions
 - Implemented school streets there are currently 14 permanent Healthy School Streets. A further 42 Healthy School Streets have been implemented but not yet confirmed as permanent. 10 were implemented during 2019-20 and 32 were implemented during 2022-23

Green Infrastructure. We installed 60 new planting bays alongside roads in the borough's neighbourhoods, funded by the Mayor of London.

Air pollution is associated with a number of adverse health impacts. 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. There is also often a strong correlation with equalities issues, because areas with poor air quality are also often the less affluent areas^{2,3}. The annual health costs to society of the impacts of air pollution in the UK is estimated to be roughly £15 billion⁴. Croydon is committed to reducing the exposure of people in Croydon to poor air quality in order to improve health.

² Environmental equity, air quality, socioeconomic status and respiratory health, 2010.

³ Air quality and social deprivation in the UK: an environmental inequalities analysis, 2006.

⁴ Defra. Air Pollution: Action in a Changing Climate, March 2010

What we want to achieve with this plan

Our Vision

Mayor's Business plan 2022-2026

Croydon is a place of opportunity for business, earning and learning

Support the regeneration of Croydon's town and district centres, seeking inward investment and grants

Croydon is a cleaner, safer and healthier place, a borough we're proud to call home

Lead action to reduce carbon emissions in Croydon

People can lead healthier and independent lives for longer

Work closely with health services and the VCFS to improve resident health and reduce health inequalities

What are Croydon's Air Quality Priorities

To reduce exposure to air pollution and to raise awareness for residents and those who work in Croydon. It has been estimated that up to 40% of pollution in Croydon is from outside London and Europe therefore actions to reduce pollution in Croydon are limited. Therefore we need to engage with residents and businesses to reduce exposure to air pollution and to raise awareness to change people's behaviour by encouraging people to walk and cycle more so they can live healthier and more pleasant lives. By working with Public Health and others we want to raise awareness through school projects, local community projects and local businesses, so there is pride in Croydon

The **Mayor's Business plan 2022–2026** sets out priorities to make Croydon a place of opportunity for businesses, earning and learning by supporting the regeneration of Croydon's town and district centres through investment and grants; ensuring that Croydon is a cleaner, safer and healthier place we're proud to call home; and be a place where people can lead healthier and independent lives, by working closely with health services and VCFS to improve resident health and reduce health inequalities.

2. What is our approach?

The Air Quality Delivery Plan focuses on five key themes:

These themes are how we organize and think about our work. Throughout our work, we need to ensure we focus on the key questions of:

- 1) How do we identify who this work is for and targeting?
- 2) How do we support those at risk?
- 3) How do we protect those at risk?
- 4) How do we make sure those people are engaged and part of the process?
- 5) How do we know our work is achieving the results we want?

How will we deliver this?

- We will continue meeting with the Air Quality Delivery Plan Steering group led by the Pollution Team that draws in our statutory partners to implement and oversee the delivery of this plan.
- Each of the five themes will be developed further with members of the statutory partners, the voluntary sector and other organisations. This is outlined in the "What we will do" section of each template.
- We will work with Public Health to identify further interventions and projects that can be delivered in Croydon over the next five years.
- Wherever possible, we will draw in additional funding from the Mayor's Air Quality Fund (MAQF) and the DEFRA Air Quality Fund, to supplement and build on this plan.

We have developed actions that can be considered under six broad topics:

- **Monitoring and other core statutory duties:** Croydon has maintained its continuous monitoring network and increased the network using lamp post AQ sensors. This improves information about changes in air quality over time. The new equipment also allows the Council to monitor more pollutants that are in the air. The Council has made the information publicly available to help inform about air pollution.
- Emissions from developments and buildings: emissions from buildings account for about 21% of the NO_X emissions across London, so are an important source of NO₂. Croydon seeks to reduce emissions from fuel combustion. This aim aligns with Croydon's Carbon Neutral Plan.
- **Public health and awareness raising**: Increasing awareness can drive behavioural change that lowers emissions and informs the public how to reduce their exposure to air pollution;

- **Delivery servicing and freight**: Goods and service vehicles are usually diesel powered and have high NO₂ emissions. Low emission logistics requires alternatively fuelled vehicles to combat air pollution from this source;
- **Borough fleet actions**: Croydon's fleet includes light and heavy duty diesel-fuelled vehicles such as mini buses and refuse collection vehicles with high primary NO₂ emissions. Croydon will review its own fleet procurement to lead by example;
- Localised solutions: Supporting neighbourhoods to introduce information or undertake actions to improve air quality
- **Cleaner transport:** Road transport is the main source of air pollution in London. There is a need to incentivise a modal shift to walking, cycling and ultra-low emission vehicles (such as electric).

Our key priorities for 2024–2029 are:

- 1. Work towards the 2005 WHO guidelines for PM_{2.5} with a target of compliance deadline by 2030 and review the emerging policies from the GLA in respect of the 2021 WHO guidelines.
- 2. Increase the network of air quality monitoring across the borough.
- 3. Continue to engage schools around whether there is a need to introduce further Croydon Healthy School Streets (this can include traffic calming measures, Air Quality audits and increase of green infrastructure working with Trees for Cities) whilst recognising that such matters also have attendant statutory consultation requirements and procedures which would need to be adhered and substantiated including on Traffic Management grounds, prior to any introduction.
- 4. NRMM, particularly from the construction sector, is a significant contributor to London's air pollution with around seven per cent of NOx and eight per cent of PM10 emissions in London. The NRMM Low Emission Zone requires that all engines with a power rating between 37 kW and 560 kW meet an emission standard based on the engine emission "stage". The Council has signed-up for the pan London GLA NRMM scheme delivered by Merton Council, responsible for enforcing NRMM standards at major construction sites in the borough.
- 5. As Croydon is an AQMA, new developments should be air quality positive or at least 'air quality neutral'.
- 6. Continue to raise awareness and encourage behaviour changes through air quality campaigns.
- 7. Assess potential impact of intensifying Electric Vehicle Infrastructure

- 8. Reduce emissions from the burning of non seasoned wood reduce particulate emissions from wood burning in the home by an awareness campaign of appropriate words for burning.
- 9. Assess the wider role of fleet within the services the Council provides to ascertain compatibility with the Council's air quality aims. The Council fleet currently comprises 98 leased vehicles, 54 owned vehicles and 10 short-term hired vehicles. In addition there are many other Council services for which fleet would form part of their provision – i.e. all deliveries of any contractors to the Council, FM Conway (Highways), Veolia (waste and street cleansing), arbo-cultural providers. However, there are major financial implications regarding this action and it will need further assessment.
- 10. Provide new cycling and walking infrastructure and assess air quality impacts of new infrastructure.

This delivery plan sets out how Croydon Council will effectively deliver against the above broad themes and key priorities, thereby improving air quality issues that are within the Council's control and thereby leading by example. However, it is important to recognise that these are local drivers aimed at tackling air pollution and that air pollution by its very nature is cross boundary.

Engagement with partners and communities can make a difference to air quality in the borough. Croydon Council will continue its positive work with partners and communities, as the council deliver's this new action plan over the next five years.

This AQDP outlines how the Council will plan to use local levers under our control to greatest effect in tackling air quality.

However, there are many air quality policy areas outside the Council's influence (such as Euro standards, national vehicle taxation policy, taxis and buses) and Croydon Council will continue to work with and lobby regional and central government on policies and issues beyond Croydon's direct control.

3. Air Quality Monitoring

Summary of current air quality in Croydon

The 2019 UK Clean Air Strategy provides the overarching strategic framework for air quality management in the UK and contains national air quality standards and objectives established by the Government to protect human health. The Strategy objectives take into account limit values set under EU Directives that member states are legally required to achieve by their target dates. On leaving the EU, the UK incorporated this requirement into national law.

Reviewing Croydon's monitoring data over the last few years shows that Croydon is meeting all of the national objectives other than for Nitrogen Dioxide (NO₂). The monitoring data in 2020 was influenced by the reduced traffic flows in response to the COVID-19 lockdowns. The 2016 London Atmospheric Emission Inventory concentration maps show that there are areas in Croydon that exceed the legal objectives.

Croydon has four continuous air quality monitoring stations located in London Road, Norbury; Norbury Manor school, Norbury; Wellesley Road/Park Lane and at the Fiveways junction, Purley Way. Details can be found at:

http://www.londonair.org.uk/london/asp/publicbulletin.asp?la_id=8. Additional data from the London Atmospheric Inventory (LAEI) 2013 can be found at http://data.london.gov.uk/london/asp/publicbulletin.asp?la_id=8. Additional data from the London Atmospheric Inventory (LAEI) 2013 can be found at https://data.london.gov.uk/dataset/london-atmospheric-emissions-inventory-2013

For full details of current air quality in Croydon please review our Annual Status report which can be found on the Love Clean Air website (http://lovecleanair.org/local-air/local-reporting/croydon-2/#.)

The UK has legally binding targets to reduce overall national emissions of five air pollutants (fine particulate matter, ammonia, nitrogen oxides, sulphur dioxide, and non-methane volatile compounds) by 2020 and 2030. The Government has set two further targets for fine particulate matter (PM2.5) in England through The Environmental Targets (Fine Particulate Matter) (England) Regulations 2023 (SI 2023/96):

• PM2.5 annual mean concentration target – a target of 10 micrograms per cubic metre (µg m3) to be met across England by 2040.

• PM2.5 population exposure reduction target – a 35% reduction in population exposure by 2040 (compared to a base year of 2018).

For PM_{2.5} the legal objective is far higher than the World Health Organisation (WHO) recommended guideline limit. For this reason, the Mayor for London's London Environment Strategy commits to meeting the 2005 WHO health-based guideline limits across London by 2030. Current air quality data indicates that Croydon is exceeding World Health Organisation guideline PM_{2.5} limits. Developing measures to reduce PM_{2.5} will be important to help achieve this 2030 target.

Particulate Matter (PM) is the term for a mixture of solid particles and liquid droplets found in the air. Some particles, such as dust, dirt, soot, or smoke, are large or dark enough to be seen with the naked eye. Others are so small they can only be detected using an electron microscope.

Particle pollution includes:

Particulate Matter (PM₁₀) are inhalable particles, with diameters that are generally 10 micrometres and smaller and Particulate Matter (PM_{2.5}) are fine inhalable particles, with diameters that are generally 2.5 micrometres and smaller. In comparison a diameter of a single hair from your head is about 70 micrometres in diameter – making it about 30 times larger than the largest fine particle.







Figure 2 Modelled map of annual mean PM₁₀ (from the LAEI 2019)

Figure 3 Modelled map of annual mean PM_{2.5} (from the LAEI 2019)



AQMA's and Focus areas

In Croydon an Air Quality Management Area (AQMA) has previously been declared for the whole of the borough.

The AQMA has been declared for the following pollutant/s: Nitrogen dioxide – because Croydon is failing to meet the EU annual average limit for this pollutant at some of our monitoring stations and modelling indicates it is being breached at a number of other locations.

An air quality Focus Area is a location that has been identified as having high levels of pollution and human exposure. There are five focus areas in the borough. These are:

- Norbury London Road
- Thornton Heath Brigstock Road/High Street/Whitehorse Lane
- Waddon Fiveways Corner
- Thornton Heath Pond and London Road to St. James Road
- Purley Cross

Sources of Pollution in Croydon

Pollution in Croydon 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.

Figures 5, 6 and 7 show the sources of pollution in the borough. They show that of the pollution that originates in the borough the main sources of NO_2 are road transport at 60% with industrial/commercial heat and power at 16%, domestic and commercial gas heating at 14% and construction at 10%.

The main sources of PM_{2.5} are road transport at 34%, domestic biomass (wood burning) at 26%, domestic heat/power at 10%, construction at 10%. Croydon has a number of industrial sources in the borough known as Part B processes. There are a total of 75 processes in Croydon, the majority being dry cleaners but also petrol stations, one crematorium, one cement batching plant and two vehicle resprayers. There is an aggregate site

which is enforced by the Environment Agency (EA). In addition there is one Part A process, a gas powered energy plant which is enforced by the EA.

Air quality can also be affected by the ongoing and future growth in central Croydon which is undergoing significant change. As more development occurs and the residential, working and visiting population increases, this can create more pollution which needs to be managed.



Figure 4 NOx Emissions by source (from the LAEI 2019)



Figure 5 PM₁₀ Emissions by source (from the LAEI 2019)

Figure 6 PM_{2.5} Emissions by source (from the LAEI 2019)



4. Measuring Impact

For the plan to succeed, Croydon must be clear about what it is attempting to achieve and how it will be measured. This is a complex area with many interlinked elements, both short and long term, and measuring our impact is both challenging and necessary if Croydon is to succeed.

Our top line measures:

- Monitoring and other core statutory duties To improve information about changes in air quality over time.
- Emissions from developments and buildings Seek to reduce emissions from fuel combustion.
- **Public health and awareness raising –** Increasing awareness can drive behavioural change that lowers emissions, and informs the public how to reduce their exposure to air pollution.
- Delivery servicing and freight Seek to increase alternatively fuelled vehicles to combat air pollution from this source.
- Borough fleet actions Croydon will review its own fleet procurement to lead by example.
- Localised solutions Supporting neighbourhoods by providing information or undertake actions to improve air quality.
- **Cleaner transport** There is a need to incentivise a modal shift to sustainable and active travel such as walking, cycling and ultra-low emission vehicles (such as electric).

Theme & project performance targets

Each of the five themes that contribute to delivering our top line measures will have specific performance targets and metrics developed that both measure the impact of the work. As outlined under our commitments to co-production, these will be further developed with the community and voluntary sector over the lifespan of this action plan. Every project intervention or action within the plan must be accompanied by a measurement of outcome and impact where possible for it to be agreed by the steering group board.

Public Health analysis & support

It is important to recognise the expertise and value of Public Health led evaluation in any intervention. We will involve and work with The Director of Public Health and their senior team to ensure that the principles and tools of public health analysis are embedded throughout all our work in delivering this plan. The Director of PH has identified some dedicated time of a Consultant in Public Health to support this work.

How will it be monitored?

Monitoring will be through the Air Quality Delivery Plan Steering Group Annual status report for air pollution and action plan updates

Development and Implementation of Croydon's AQDP

Partner Engagement

In developing/updating the delivery plan, the council will work with other local authorities, agencies, businesses and the local community to improve local air quality. Croydon Council will carry out the following engagement with partners:

- Articles in local newsletter
- Information on the councils website
- Information on 'love clean air' website
- Email briefings to community and voluntary sector organisations
- Attendance at festivals
- Drop in events in Surrey Street
- Focus groups
- Online Survey
- Articles in 'Our Croydon'
- Plasma Screen in lift lobbies
- Screen in Access Croydon

Consultation to be undertaken for the final AQDP

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

5. Delivery Plan

This Matrix outlines 25 actions to consider delivering locally as part of Croydon's London Local Air Quality Management action planning obligations. This is not an exhaustive list. It is a list of actions which utilise the levers that are under borough control which may be used to improve air quality. Where possible each action includes: examples/case studies, an assessment of the possible benefits, and a provisional assessment of high-level risks.

The actions have been assessed against the perceived ease of delivery and the possible magnitude of air quality benefits, and these scores are then multiplied to give a priority rating (the highest being 1 and the lowest 15). In reality, the ease of delivery and possible benefits will clearly vary very significantly from borough to borough and will depend on the characteristics of the individual projects; these ratings should therefore be viewed as an indicative guide only, and boroughs will obviously need to consider local conditions when assessing the potential ease and benefits of actions.

The Matrix actions are divided into 6 categories: Emissions from developments and buildings; Public health and awareness raising; Delivery servicing and freight; Borough fleet actions; Localised solutions; and Cleaner transport. This document begins with a Main Table, summarising the actions and their priority level ratings. Initial suggestions for KPIs are shown within each action and these will be further developed as part of the statutory consultation, to be included in the final Air Quality Delivery Plan. Also, prior to the Plan being approved, actions within this Main Table will contain links which will lead to more detailed information on the action.

The Matrix will be a living document; it will be refreshed every five years, at which time actions may be added, removed or modified.

Air Quality Monitoring

Air quality monitoring is critical to understanding and addressing the problem. Borough monitoring networks are essential to this. They also inform and validate all modelling for London. Monitoring is the bedrock of the LLAQM (London Local Air Quality Management)

It is led by the Councils Pollution Team. An annual air quality status report is provided detailing air pollution and action plan updates and is approved by the GLA.

Air Quality Monitoring and other core statutory duties	Lead Services Organisations	Timescale	Why is Croydon Council doing this and what will it achieve?	Outputs, Targets and KPI	Information
1. Maintaining and where possible expanding monitoring networks, and fulfilling other statutory duties	Pollution Team	1. Ongoing	Monitoring is critical to understanding and addressing the problem. Borough monitoring networks are essential to this.	KPI: All monitors fully calibrated & serviced every year. Target: Over 90% data capture at all sites.	The pollution team to extend the monitoring network at hot spot areas in the borough.
2. To undertake procurement exercise to purchase new NOx and PM2.5 equipment using section 106 funding for existing continuous monitoring station		2. September 2024	Essential for enabling awareness raising and understanding the extent of the problem and identifying targets for action and funding. They also inform and validate all modelling for London.	KPI: Submission of statutory annual status report on time each year.	Details of monitoring can be found at lovecleanair.org. Includes Latest Annual Status Report. Additional monitoring to be an integrated part of planning process, to enable assessment, mitigation and protection against adverse impacts from construction

Emissions from developments and buildings

The main air quality risks during construction and demolition are fugitive emissions from on-site activities, transport of materials, waste and staff to and from site (logistics) and emissions from on-site non-road mobile machinery (NRMM), with around seven per cent of NOx and eight per cent of PM10 emissions in London. It is a statutory requirement to undertake regular inspections to ensure compliance.

This is led by the Pollution Team both proactively reviewing Construction Logistics Plan and enforcement by officers where required.

In addition wood burning is responsible for between 23 and 31 per cent of the urban derived PM2.5 in London. All London boroughs have declared Smoke Control Zones, under the Clean Air Act 1993, covering some or all their area. Emissions of dark smoke from chimneys are not allowed in these areas.

Emissions from developments and buildings	Lead Services Organisatio ns	Timescale	Why is Croydon Council doing this and what will it achieve?	Outputs, Targets and KPI	Action / Information
3. Ensuring emissions from construction are minimised During construction, developers and contractors should follow the guidance set out in The Control of Dust and Emissions during Construction and Demolition Supplementary Planning Guidance: carry out an Air Quality and Dust Risk Assessment and submit an Air Quality and Dust Management Plan for	Pollution Team/ Planning Development	Ongoing	Minimise exposure of residents near developments. Avoids unnecessary emissions from construction sites. Encourages planners, developers and local authorities to think about air quality through every stage of the development and construction process.	Target: 100% of relevant applications to include appropriate conditions on construction dust mitigation.	 Pollution Officers review all Construction and Logistics Plans for approval. Enforcement officers carry out visits following complaints regarding dust. The pollution team aim to employ construction compliance officer utilising section 106 monitoring fees

Emissions from developments and buildings	Lead Services Organisatio ns	Timescale	Why is Croydon Council doing this and what will it achieve?	Outputs, Targets and KPI	Action / Information
the construction, implement mitigation	D. H. C.			Target: 100% of relevant	
4. Ensuring emorcement of Non Road Mobile Machinery (NRMM) air quality policies. As well as fugitive dust emissions (air pollutants generated during construction activities such as sand) from onsite activities, another major source of emissions from construction sites is from Non-Road Mobile Machinery (NRMM). NRMM used in the construction and infrastructure building sectors currently accounts for around seven per cent of NOx and eight per cent of PM10 emissions in London. For example a generators and construction machinery used on site	Pollution Team/Pan- London NRMM Group	Ongoing	Minimise exposure of residents near developments from the onset. Avoids unnecessary emissions from construction sites. NRMM contributes to a large proportion of emissions. The pan- London NRMM Low Emission Zone relies on consistent delivery and on-site enforcement by all boroughs to ensure it is effective and credible, and there is Mayor's Air Quality Funding available to support this	applications to include appropriate conditions on PM and NOx mitigation	The NRMM Low Emission Zone requires that all engines with a power rating between 37 kW and 560 kW meet an emission standard based on the engine emission "stage". LBC has signed-up for the pan London GLA NRMM scheme delivered by Merton Council, responsible for enforcing NRMM standards at major construction sites in the borough.
5. Reducing emissions from combustion-based Combined Heat and Power (CHP) Plant	Pollution Team/ SCRER/ Development Management	Ongoing	Combustion-based CHP can be a significant source of local emissions so tackling this is an important priority.	Target: Conditions attached to ensure that 100% of new energy installations are compliant with the latest London Plan. KPI: To be reported on annually	We seek compliance with London Plan policies that require developers to quantify the impact of CHPs on air quality to support their air quality neutral (AQN)/air quality positive (AQP) proposal, as opposed to accepting qualitative treatment.

Emissions from developments and buildings	Lead Services Organisatio ns	Timescale	Why is Croydon Council doing this and what will it achieve?	Outputs, Targets and KPI	Action / Information
					The Pollution Team will work with Planning and the Procurement Team to ensure the most suitable abatement technology to reduce emissions
6.Enforce Air Quality Neutral policy (AQN) a. Air Quality Neutral is a benchmark standard for new buildings. It is designed to ensure that they do not emit more pollution than existing buildings of the same type. b. Reduce emissions from emergency diesel-or petrol powered generators	Pollution Team/ SCRER	Ongoing	Reduces the contribution to pollution from new development. Minimise exposure to residents of new developments from the onset	Target: Conditions attached to any developments that propose any emergency generators onsite. KPI: To be reported annually.	LBC encourages developers to harness and maximise energy from renewables and using technology (air/ground source heat pumps and Photovoltaics (PV) . All eligible developments must provide appropriate AQN/AQP documentation/mitigations. LBC will consider alternative technology to diesel generators. If viable alternatives can't be found, then developers will be requested to submit post installation emission testing by an accredited laboratory to ensure NOx emissions at the flue meet emission standard of 150mg/Nm-3 (at 5% O2). Substituting diesel generators for alternative cleaner power (mains electricity) can be undertaken at construction sites, emergency power back-ups, roadside servicing and repairs, fast-food kiosks/outlets on high streets, leisure events, summer festivals, wherever there is relevant exposure and risk to public health. Construction plans including diesel generators at construction sites. The pollution team will review all planning applications to ensure air quality neutral is incorporated into the planning application

Lead Services Organisatio ns	Timescale	Why is Croydon Council doing this and what will it achieve?	Outputs, Targets and KPI	Action / Information
Pollution Team/ SCRER	Ongoing	Air Quality Positive is a new approach and it seeks to exploit the ability of large developments to shape their area to build in benefits for air quality	Target: 100% of eligible developments meeting the air quality neutral standards per year. KPI: To be reported annually	The pollution team will continue to review all planning applications to ensure air quality positive is incorporated into the planning application.
Pollution Team/ SCRER/Dev elopment Management	Ongoing	Green infrastructure schemes can transform urban areas and help to provide improved public spaces. Whilst it can be hard to quantify air quality exposure improvements from such schemes it may therefore be useful to consider such schemes as part of the Healthy Streets approach or to look at the measures of success built into Green Infrastructure proposals	Target: 100% of major development applications to integrate green space/communal gardens. KPI: To be reported annually	Green space on new developments can provide a range of important functions. It can for example provide a way to set the building back from the kerbside thereby reducing exposure of occupants. Other green infrastructure such as trees, hedges and green walls can also provide a barrier between roads and new developments. The Croydon Local Plan has policies that enhance greening. Policy SP6: Green Grid states that in order to deliver new and enhance green infrastructure commensurate with growth the council will apply a presumption in favour of development provided applications assist in the delivery of a Green Grid. The Pollution Team will continue to seek
	Lead Services Organisatio ns Pollution Team/ SCRER Pollution Team/ SCRER/Dev elopment Management	Lead Services Organisatio nsTimescalePollution Team/ SCREROngoingPollution Team/ SCRER/Dev elopment ManagementOngoing	Lead Services Organisatio nsTimescaleWhy is Croydon Council doing this and what will it achieve?Pollution Team/ SCREROngoingAir Quality Positive is a new approach and it seeks to exploit the ability of large developments to shape their area to build in benefits for air qualityPollution Team/ SCRER/Dev elopment ManagementOngoingGreen infrastructure schemes can transform urban areas and help to provide improved public spaces. Whilst it can be hard to quantify air quality exposure improvements from such schemes it may therefore be useful to consider such schemes as part of the Healthy Streets approach or to look at the measures of success built into Green Infrastructure proposals	Lead Services Organisatio nsTimescaleWhy is Croydon Council doing this and what will it achieve?Outputs, Targets and KPIPollution Team/ SCREROngoingAir Quality Positive is a new approach and it seeks to exploit the ability of large developments to shape their area to build in benefits for air qualityTarget: 100% of eligible developments meeting the air quality neutral standards per year. KPI: To be reported annuallyPollution Team/ SCRER/Dev elopment ManagementOngoingGreen infrastructure schemes can transform urban areas and help to provide improved public spaces. Whilst it can be hard to quantify air quality exposure improvements from such schemes it may therefore be useful to consider such schemes as part of the Healthy Streets approach or to look at the measures of success built into Green Infrastructure proposalsTarget: 100% of major development applications to integrate green space/communal gardens. KPI: To be reported annually

Emissions from developments and buildings	Lead Services Organisatio ns	Timescale	Why is Croydon Council doing this and what will it achieve?		Action / Information
9.Assess feasibility and appropriateness of extending Smoke Control Zones to the whole of the borough. Currently only half the borough is a smoke control zone.	Pollution Team/ Public Health Department/ London wide wood burning project group	December 2024	Raise awareness: Research suggests that many Londoners are unaware that they live in a Smoke Control Zone and are unintentionally breaching current legislation and consequences to the public.	Assess current level of non compliance in respect of wood burning in the borough and as deemed necessary, undertake awareness campaign with residents and business to reduce the use of unsuitable wood and greater use of more effective wood burning technology.	Explore feasibility of extending the smoke control zone across the whole borough. Research suggests that wet wood fuel contributes far more to particulate emissions than dry wood. Changing consumer habits is the best way to address this issue. An awareness campaign could reap huge benefits. Raise awareness: Research suggests that many Londoners are unaware that they live in a Smoke Control Zone and are unintentionally breaching current legislation and consequences to the public. The AQAP 2017-22 consultation process found that residents responded that 50% strongly agreed and 23% agreed to extend the smoke control to the whole of the borough
10.Burning Wood Appropriately Reduce emissions from wood burning by undertaking an awareness campaign with residents to seek to ensure that the most appropriate wood burning methods are used	Pollution Team	Ongoing	Recent research suggests that wood burning is responsible for between 23 and 31 per cent of the urban derived PM2.5. Imperial College estimates that each year wood burning contributes between 23% and 31% of the PM2.5 emitted from	Undertake initial awareness campaign in respect of correct type of wood to burn and best use of the most effective wood burning technology/appliances to reduce emissions and therefore health harms by March 2025.	 Actions: An awareness campaign with residents to include the provision of visible advice on fuels and appliances at point of sale, as well as information on bonfires and barbeques. Engaging local suppliers within smoke control zones to ensure only appropriate technology and fuels are sold. This could include a

Emissions from developments and buildings	Lead Services Organisatio ns	Timescale	Why is Croydon Council doing this and what will it achieve?	Outputs, Targets and KPI	Action / Information
			 within London. Reducing this would clearly have a huge impact on PM2.5 emissions This does not seek to ban wood burning, rather to encourage the correct fuels and that the most effective wood burning technologies are used. 		 recognition scheme for responsible vendors. Provide and publicise garden waste collection services to reduce bonfires Croydon is part of the London wide wood burning project: to date - undertaken an air quality survey with residents; produced press releases; guidance documents.
11.Promoting and delivering energy efficiency and energy supply retrofitting projects in workplaces and homes through Energy For Londoners (EFL) retrofit programmes such as RE:FIT, RE:NEW and through borough carbon offset funds. Gas boilers are the second largest individual source of NOx (Nitrogen Oxides) in London. They also contribute significantly to indoor air pollution.	Pollution Team/ Carbon Neutral Programme Manager/ Energy Team Leader	Ongoing	Gas boilers are the second largest individual source of NOx in London. They also contribute significantly to indoor air pollution. Directly reduces emissions and has co- benefits for carbon emissions and reducing fuel costs. Furthermore, there are existing frameworks to support this.	Achieve a reduction in gas boilers being used in domestic and work settings through consumer behaviour shift to alternative energy sources.	Work with the Carbon Neutral Programme Manager and the Energy Team Leader regarding implementing this action.

Public Health and awareness raising

The Council is committed to protect public health and to improve air quality. Boroughs have integrated Public Health Departments and responsibilities to deliver against the Public Health Outcomes Framework. It is therefore of critical importance that air quality teams work closely with Public Health.

Councils should ensure that Directors of Public Health (DPH's) are regularly briefed on the scale of the problem in their local authority area; what is being done and what is needed.

Public Health Officers are on the air quality steering groups and help to ensure air quality is prioritised and that work on this agenda is recognised and easily evaluated through checking success of outcomes. It is led through a combination of statutory services, the pollution team and public health

Public Health and awareness raising	Lead Services Organisations	Timescale	Why is Croydon Council doing this and what will it achieve?	Outputs, Targets and KPI	Actions
12.Public Health department taking shared responsibility for borough air quality issues and implementation of Air Quality Delivery Plans.	Pollution Team /Public Health Department	Ongoing	Helps to ensure Directors of Public Health (DPH) are fully informed of the scale of the problem. Protecting public health is at the heart of the Council's efforts to improve air quality. It is of critical importance that air quality teams work closely with Public Health. Ineffective engagement with the DPH could lead to air quality being viewed as a burden rather than a genuine Public Health issue.	Target: Ensure that the Director of Public Health is consulted on Annual Status Reports and the Air Quality Delivery Plan.	Continued joint working with the Public Health Team
13.Engagement with businesses.	Pollution Team/ Carbon Neutral Programme	October 2024	The council can use existing communication channels and	Output: Croydon Council will Consider creating an internal working group to focus on	To work with the Carbon Neutral Programme Manager and the Head of Employment,

Engagement with businesses to encourage active changes to improve air quality, particularly the NHS, schools, and Croydon Council – and their local supply chains	Manager/Head of Employment, Skills & Economic Development		relationships with BIDs and businesses. Reduces staff exposure as well as emissions. This provides an opportunity for businesses to work together to maximise benefits. For example, encouraging the businesses in an area to coordinate their deliveries and collections more efficiently, and adopt collective and/or collaborative deliveries and collections.	engaging with businesses on air quality. KPI: Monitor the progress of local businesses. Anchor institutions and local supply chains will be targeted.	Skills & Economic Development to deliver some of these actions.
14.Supporting a direct alerts service such as Airtext, and promotion and dissemination of high pollution alert services.	Pollution Team	Ongoing	airTEXT is a tool that provides forecasts of air quality, UV, grass pollen and maximum and minimum temperature alerts to vulnerable people; this is a fundamental element of delivering on air quality duties. Using social media to help disseminate the Mayor's alerts is also a low-cost way to raise awareness and reduce exposure amongst residents.	High pollution alert service information to be incorporated into Health Protection Forum and relevant extreme weather response/planning forums e.g. Winter planning. Awareness raising of airTEXT/high pollution alert services to be undertaken.	Croydon has signed-up to both the GLA's air pollution alerts and the airTEXT service; these are shared with schools, GP surgeries and care Homes. We will continue to look at new ways to increase airTEXT membership via SMS. Croydon will investigate improved engagement with GP surgeries, via Public Health, to target and protect vulnerable groups from impacts of air pollution, by increasing free subscription of airTEXT. airTEXT is also promoted on social media channels

 15.Encourage schools to join the TfL Travel for Life scheme (formerly Stars scheme) STARS for primary schools will be renamed TfL Explorers. STARS for secondary schools will be renamed TfL Pioneers. STARS schools implement safer and sustainable travel initiatives, resulting in reductions in car use and increases in walking and cycling on the journey to school as well as more responsible use of public transport. 	Independent Travel, Streets & Environment	Programme to start September 2024	Increases awareness of air quality as an issue and can increase support for measures to improve air quality and public health, e.g. smarter travel and reduced idling. Protect children from the effects of poor air pollution around schools	STARS accreditation KPIs: No. TfL Explorers No. TfL Pioneers No. Schools achieved or working towards accreditation	The Council to encourage more schools to join the TfL Travel for Life scheme. TfL Explorers for primary schools. TfL Pioneers for secondary schools
 16.Air quality in and around schools, and extending schools audits to all polluted schools (and potentially to other vulnerable groups, such as nurseries) Protect Croydon's schoolchildren by reducing their exposure to poor air quality. One of the programmes delivered to support this is the schools audit programme to identify measures to reduce pollution in and around the top of Croydon's most polluted schools. This includes Idling Vehicle projects in school streets 	Pollution Team	Programme to start September 2024	The air quality audits identify measures to reduce pollution in and around Croydon's most polluted schools. Schools projects can help to reduce exposure and emissions and help target one of the most vulnerable groups. The council will continue to undertake idling vehicle patrols around schools and enforcement where complaints have been received. An application for funding to continue raising awareness around schools and	No. of school streets implemented No. Air quality audits No. Cycle improvements No. Air quality monitoring units extended	Winterbourne Junior Girls' School has succeeded in gaining bronze accreditation and is now moving forward towards silver. To undertake air quality audits at 10 schools per year to do more to protect London's schoolchildren by reducing their exposure to poor air quality.

	idling has been submitted for MAQF.	

Delivery servicing and freight

The aim is reduce emissions from freight by encouraging a switch to lower emission vehicles, adopting smarter practices and reducing freight movements by better use of consolidated trips.

This work is primarily led by Independent Travel, Streets & Environment

Delivery servicing and freight	Lead Services Organisations	Timescale	Why is Croydon Council doing this and what will it achieve?	Outputs, Targets and KPI	Actions
 17.Update of Procurement policies to reduce pollution from logistics and servicing. Boroughs carry out a number of high value procurements and so have a role to play in addressing emissions from vehicles used in the delivery of products/services they procure. Procurement policies which favour the use of sustainability could also act as a catalyst to change the market, by prioritising companies who incorporate sustainable measures 	Procurement/ Development Planning	September 2024	Procurement should be using their procurement policy and purchasing power to influence and incentivise suppliers to use cleaner vehicles wherever possible Reducing vehicle movements helps alleviate congestion and improves road safety.	Contracts awarded to external suppliers via Procurement Policy should, where feasible, include a requirement and/or incentives for cleaner vehicles to be used by the supplier in the provision of the service provided.	To work in conjunction with the Council's Procurement Team in respect of sustainable procurement policies.
18.Reducing emissions from deliveries to local businesses and residents. Almost all of London's freight is carried by road using diesel vehicles. Freight activity accounts for around a	Independent Travel, Streets & Environment	Ongoing	The aim is to reduce emissions from freight by encouraging a switch to lower emission vehicles, adopting smarter practices and	Involvement in providing comments on potential updates to procurement policies to seek to reduce pollution	The aim is to reduce emissions from freight by encouraging a switch to lower emission vehicles, adopting smarter practices and reducing freight

Delivery servicing and freight	Lead Services Organisations	Timescale	Why is Croydon Council doing this and what will it achieve?	Outputs, Targets and KPI	Actions
fifth of motor traffic in London. During the morning peak in central London this increases, so freight accounts for around a third of the total traffic.			reducing freight movements by better use of consolidated trips In addition reducing vehicle movements helps alleviate congestion and improves road safety	from logistics	movements by better use of consolidated trips
19.Reducing emissions from council fleets. The Mayor for London Transport Strategy (MTS) states that the Mayor and associated organisations will seek to make London's transport network zero carbon by 2030. This will also further improve air quality. To reach this ambitious target, the GLA group, TfL and other public- sector groups must lead by example.	Procurement /Independent Travel	Ongoing	It is important for boroughs to be leading by example and fleets are directly within the control of the council.	Target: No. EV to vehicle fleet No. EVCP's (electric vehicle charging points) implemented	To work with Procurement to ensure that the council is working towards network zero carbon by 2030

Borough Fleet Actions

The London Mayor's Transport Strategy (MTS) states that the London Mayor and associated organisations will seek to make London's transport network zero carbon by 2050. This will also further improve air quality. To reach this ambitious target, the GLA group, TfL and other public-sector groups must lead by example in the use of Ultra Low Emission Vehicles. Where possible, boroughs should examine the feasibility of updating their fleet with alternatively fuelled vehicles; hydrogen, electric, hybrid and bio-methane vehicles.

Boroughs should also seek to re-train fleet drivers to ensure vehicles are driven in the most low-emitting and fuel-efficient manner possible.

Borough Fleet Actions/ Reducing emissions from council fleets	Lead Services Organisations	Timescal e	Why are we doing this and what will it achieve?	Outputs, Targets and KPI	Actions
20.Increasing the number of hydrogen, electric, hybrid, bio-methane and petrol vehicles in the Borough's fleet This is complex and there are different needs for each borough.	Independent Travel / Strategic Transport	Ongoing	Boroughs can work with leasing companies to gain value for money for cleaner commercial vehicles, and funding may be available to assist (such as from The Office for Low Emission Vehicles (OLEV). Electric vehicles are also cheaper to run so the higher capital costs can sometimes be negated. Smarter Driver Training for drivers of vehicles in the borough's own fleet i.e. through training of fuel-efficient driving and providing regular re- training of staff	KPI: Total No. of training sessions carried out	To investigate the use vehicle telematics to monitor driver behaviour. This highlights speeding, harsh driving, idling etc. This information is then fed back to drivers to improve driver behaviour

Localised Solutions

There are a number localised solutions to improve air quality such as Green Infrastructure (GI).

Green Infrastructure is moderate in terms of concentration benefits but does have a number of co-benefits and funding can be sourced through a variety of schemes.

Localised Solution	Lead Services Organisation s	Timescal e	Why are we doing this and what will it achieve?	Outputs, Targets and KPI	Actions
 21.Green infrastructure (GI) Green Infrastructure influences pollution dispersal and deposition. GI interacts with pollution formation and removal at regional and local scales. If designed properly, GI can help to mitigate poor air quality on a local-scale. It should be noted however that GI can never remove all the pollutants from air. It also becomes less and less efficient the further away it is from sources of pollution. There is a commitment by the London Mayor to make London at least 50 per cent green by 2050. 	Pollution Team/ Spatial Planning	Ongoing	Green infrastructure schemes can transform urban areas and help improve public spaces. However, it can be hard to quantify their effectiveness in terms of reducing emissions.	The council to develop GI targets. Total No. Trees planted	Spatial Planning confirmed planning guidance has been reviewed on the All London Green Grid. To investigate increasing number of trees and Green Infrastructure There are cost implications for the ongoing maintenance of any green infrastructure so it is important that any schemes include these measures

Cleaner Transport

It is well documented that road traffic emissions are one of the main sources of air pollution in London. It is therefore vital that there is effective communication between those managing air quality issues with boroughs and those managing traffic and travel.

Boroughs should ensure that internal transport teams are fully aware of the air quality issues affecting London, and that formal regular communication channels are in place.

Effective communication between teams could be achieved several ways, including: • Heads of Transport should sign off AQAPs and review them annually. • Air quality risks should be fully evaluated in all transport feasibility studies and proposals. • Provision of regular briefings to the Transport Team on local air quality issues and projects, and the location of hotspots/Focus Areas. • Making a requirement for an air quality official to attend transport steering groups, and vice versa. • Incorporating quality based targets within specific Transport job roles, ensuring accountability and delivery.

Cleaner Transport	Lead Services Organisatio ns	Timescal e	Why is Croydon Council doing this and what will it achieve?	Outputs, Targets and KPI	Actions
22.Ensuring that Transport and Air Quality policies and projects are integrated	Pollution Team / Strategic transport	Ongoing	To reduce air pollution levels To reduce carbon emissions To improve the walking and cycling environment Enhanced commercial environment	Target: 100% of AQ and Transport policies and projects to be integrated. Target: 100% of major road schemes to include integrated air quality monitoring	Examples of current integrated policies include policies on school travel plans, school streets, modal shift to walking and cycling, emissions-based parking charges that promote cleaner vehicles and electric vehicles Effective communication between teams could be achieved several ways, including: Heads of Strategic Transport and Highways and Parking will be consulted on and involved withthe monitoring and review of the AQAP. Air quality risks should be fully evaluated in all transport feasibility studies and proposals. Provision of regular briefings to the Transport Team on local air quality issues and projects, and the location of hotspots/Focus Areas. Air quality officer to share minutes and vice versa.

Cleaner Transport	Lead Services Organisatio ns	Timescal e	Why is Croydon Council doing this and what will it achieve?	Outputs, Targets and KPI	Actions
23. Discouraging unnecessary idling by taxis and other vehicles	Pollution Team	Ongoing	It is an easy action for people to take to reduce completely unnecessary emissions. Under Regulation 98 of The Road Vehicles (Construction and Use) Regulations 1986, it is an offence to leave a vehicle engine running unnecessarily while that vehicle is stationary on the roadside. Since 2002, under Regulation 12 of The Road Traffic (Vehicle Emissions) (Fixed Penalty) (England) Regulations 2002, Local Authorities have been given the powers to enforce the switching off of engines when vehicles are stationary on the roadside. This enables local authorities to issue a Fixed Penalty Notice (FPN) of £20 to a driver who is committing an offense by idling their vehicle's engine. Aside from enforcing idling by issuing FPNs, a council may choose to create a Traffic Management Order, under	Target: Identify pollution hotspots for additional anti-idling measures. Target: 75% AQ hot spots to have anti-idling signage.	The council to continue to undertake proactive and reactive idling vehicle visits and will co- ordinate this with school streets. Consider introducing 'no vehicle idling' areas, particularly where groups of vehicles congregate (such as outside schools, hospitals and care homes) and in areas where exposure to road-traffic-related air pollution is high. While hard to police these regulations in all locations it is possible to identify areas where groups of vehicles are currently idling to aid targeted action: • to enforce against idling • Using road signs to inform drivers about no-idling/no- idling zones. • Supporting school and community no idling campaigns

Cleaner Transport	Lead Services Organisatio ns	Timescal e	Why is Croydon Council doing this and what will it achieve?	Outputs, Targets and KPI	Actions
			the Road Traffic Regulation Act 1984, so that traffic enforcement officers within the local authority are able to issue Penalty Charge Notices (PCNs) of £80 for idling vehicles. In addition, Rule 123 of the Highway Code states drivers must not leave a parked vehicle unattended with the engine running or leave a vehicle engine running unnecessarily while it is stationary on a public road. Existing projects have found that drivers turned off engines when asked and there was no need to issue FPN's (fixed penalty notices). The number of reports of idling vehicles reduced as a result and the project was considered a success.		

Cleaner Transport	Lead Services Organisatio ns	Timescal e	Why is Croydon Council doing this and what will it achieve?	Outputs, Targets and KPI	Actions
24.Using parking charges to incentivise the use of lower emission vehicles	Highways & Parking Services	Autumn 2024	Vehicle journeys are critical to the vitality of the borough. It is important that we take a balanced approach so these journeys have the minimum impact on the borough.	Target: 100% of car clubs to be EV (proportional to demand)	Assess how revised parking charges have impacted on willingness to use cleaner vehicles, including the reduction of discounts proposed for these vehicle types. Ensure that planning and parking policy continually meets evolving needs, including Car Clubs & Electric Vehicle Parking Points.
25.Assess the potential of intensifying Electric Vehicle Infrastructure (electric vehicle charging points, rapid electric vehicle charging point and hydrogen refuelling stations)	Independent Travel/ Strategic Transport	Ongoing	To succeed in making the transition to electric vehicles, Croydon needs a major expansion in electric charging and possibly hydrogen infrastructure. Reduces emissions and helps raise awareness of and familiarity with EV's amongst a broader audience.	Target: Subject to demand assessments, Increase number of electric vehicle charging points No. by 2026	To assess the demand for electric vehicles and charging points where required. Develop a policy which allows for further growth in electric vehicle charging points when a certain number of electric vehicles are registered in an area allows for continued growth of the new technology.
26.Provision of infrastructure to enable Active Travel measures The 'Neighbourhoods Approach' is a	Highways & Parking Services	Ongoing	Better walking and cycling environments can connect communities and provide a welcoming and inclusive city for everyone.	 Target: Deliver walking & cycling measures. Cycling infrastructure eg. increase number of cycle hangars in the borough. 	 Via the Local Implementation Plan (LIP) the intention is to encourage Sustainable and Active travel. Improve the flow of people and goods into and out of the town centre

Cleaner Transport	Lead Services Organisatio ns	Timescal e	Why is Croydon Council doing this and what will it achieve?	Outputs, Targets and KPI	Actions
framework that puts people and their health at the heart of the decision making, helping everyone to use cars less and to walk, cycle and use public transport more.			Investing in walking and cycling infrastructure enables increased activity levels amongst local communities. This provides benefits for individual health, the NHS, and for transport as a whole. Research shows that if every Londoner walked or cycled for 20 minutes a day, it could save the NHS £1.7bn in treatment costs over the next 25 years. Encourages more active travel which has a positive impact on public health (reduced rates of depression, dementia and hip fractures, amongst other benefits) and can reduce dependency on cars, improving local air quality.	Target: Support cycle training Annually. Target: Improve pedestrian experience in town centres to make walking to amenities more attractive. Target: Ensure active travel is included in new developments.	 Prioritise the access and safety of vulnerable road users (people with disabilities, cyclists, pedestrians) Improve bus, tram and taxi access Improve delivery and customer access for businesses Improve the quality of life for residents. Improve the environment Improve air quality Discourage short car journeys. Reduce the dependence on the private motor vehicle to access London Road