

LONDON BOROUGH OF CROYDON

Air Quality Action Plan 2017-2022

Draft for Consultation



Delivering for Croydon

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Foreword

One of the most significant challenges of air pollution within Croydon, London and the rest of the country is that now we can rarely see it, taste it or smell it. Gone are those epic “pea-soupers” of the 1950’s where our air pollution was clearly visible. They have, over the years, been replaced with a much more subtle, yet perhaps even more harmful, type of pollution; the invisible pollutants of nitrogen dioxide and the microscopic particulate matter that are harming all of us and contributing to early deaths.

Croydon is committed to improving air quality within its borough; this document is a new five year plan that builds on existing successful actions and develops new proposed actions to improve air quality.

Croydon pioneered the airTEXT service - this was the first of its kind in Europe. It is a free service that provides air quality alerts to vulnerable people such as those with asthma and heart and lung conditions. We were the first London borough to implement enforcement of idling vehicles and we will continue to carry out raising awareness at hotspot areas.

Our key priorities over the next five years are controlling pollution from new developments by tackling emissions from construction sites and construction vehicles, tackling emissions from servicing and freight vehicles, reducing exposure to air pollution, and raising awareness for residents and those who work in Croydon. By working with Public Health England we want to raise awareness through school projects, local community projects and local businesses.

In addition to our actions the London Mayor Sadiq Khan launched plans for the toughest crackdown on the most polluting vehicles by any major city around the world. This includes introducing the central London Ultra-Low Emission Zone one year earlier in 2019. He has made it clear that air quality is one of his top priorities. With nearly 10,000 people dying early every year in London due to exposure to air pollution, cleaning up London’s toxic air is a major public health challenge that we must all seek to address.

There is a role for all to improve our air quality - internationally, nationally, in industry and business, and in local authorities working together across London with the Mayor, GLA and Transport for London. Individually we all have a role to play in tackling air pollution through driving less and walking and cycling more.

The Croydon Air Quality Action Plan sets out how Croydon Council plans to work with all partners and local communities to improve the air quality here in Croydon. This is often presented as something so big that it cannot be readily changed however we all need to do something different.

I hope that you read this document and do or stop doing something that contributes to the improvement of air quality here in Croydon.

Together we can make a difference.

Councillor Stuart King Cabinet Member for Transport & Environment



Progress on Air Quality Action Plan 2012 - 2017

This Air Quality Action Plan (AQAP) 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 2017-2022.

This action plan replaces the previous action plan which ran from 2012 - 2017. Highlights of successful projects delivered through the past action plan include:

- Low Emission Strategies
 - **Car Club – Zip car**
 - The council have contracted Zipcar to operate pool cars for council staff use.
 - The fleet size is 23 vehicles compared to 6 at the beginning of the pilot scheme
 - The number of Croydon residents registered on the scheme continues to steadily increase – the current number is 1638.
 - **Electric Vehicle Charging Points (EVCPs)**
 - Currently there is a network of 47 EVCPs both in council surface car parks and off street.
- **Idling Vehicles**
 - Installed 20 idling vehicles signs at schools across the borough
 - Continued to carry out awareness-raising and enforcement patrols for vehicles idling unnecessarily targeting sensitive area like schools and bus stands.
- **Air Quality and Freight**
 - Croydon developed Best Practice guidance on developing Construction Logistics Plan. Now embedded in planning system. All developments require a Construction Logistics Plan. The plans are monitored by the construction compliance officer.
 - A standard condition is attached to all developments where Delivery and Servicing Plans are required
 - Night-time deliveries. Croydon have been working with TfL and successfully set up night time deliveries with 4 Tesco Stores. Croydon also participate in TfL's re-timing of deliveries working group
- **Clean Air 4 Schools**
 - We have successfully delivered a 6 week 'Clean Air 4 Schools' project in 6 primary schools in the borough.
- **Emissions from construction and demolition sites**
 - Developed a Croydon Town Centre Construction Logistics Plan 2014-2019
- **Breath Better Together campaign**
 - This was launched by the London Mayor in 2015. The aim of the campaign is to encourage people to make small behavioural changes that can make a positive impact on air quality and is particularly aimed at younger people and families.

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^{1,2}.

¹ Environmental equity, air quality, socioeconomic status and respiratory health, 2010.

² Air quality and social deprivation in the UK: an environmental inequalities analysis, 2006.

The annual health costs to society of the impacts of air pollution in the UK is estimated to be roughly £15 billion³. Croydon is committed to reducing the exposure of people in Croydon to poor air quality in order to improve health.

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

- **Emissions from developments and buildings:** emissions from buildings account for about 15% of the NO_x emissions across London so are important in affecting NO₂ concentrations;
- **Public health and awareness raising:** increasing awareness can drive behavioural change to lower emissions as well as to reduce exposure to air pollution;
- **Delivery servicing and freight:** vehicles delivering goods and services are usually light and heavy duty diesel-fuelled vehicles with high primary NO₂ emissions;
- **Borough fleet actions:** our fleet includes light and heavy duty diesel-fuelled vehicles such as mini buses and refuse collection vehicles with high primary NO₂ emissions. Tackling our own fleet means we will be leading by example;
- **Localised solutions:** these seek to improve the environment of neighbourhoods through a combination of measures; and
- **Cleaner transport:** road transport is the main source of air pollution in London. We need to incentivise a change to walking, cycling and ultra-low emission vehicles (such as electric) as far as possible.

Our priorities are:

- To control emissions from new developments. Tackling emissions from construction sites and construction vehicles through compliance with the Council's Town Centre Construction Logistics Plan.
- Tackling emissions due to servicing and freight vehicles, and so have completed a feasibility in reducing deliveries to the Council and also investigate setting up a delivery consolidation centre in congestions with other South London Boroughs
- To reduce exposure to air pollution and to raise awareness for residents and those who work in Croydon. By working with Public Health we want to raise awareness through school projects, local community projects and local businesses.

You will see in this report that we have worked hard to engage with stakeholders and communities which can make a difference to air quality in the borough. We would like to thank all those who have worked with us in the past and we look forward to working with you again as well with new partners as we deliver this new action plan over the coming years.

In this AQAP we outline how we plan to effectively use local levers to tackle air quality issues within our control.

However, we recognise that there are a large number of air quality policy areas that are outside of our influence (such as Euro standards, national vehicle taxation policy, taxis and buses), and so we will continue to work with and lobby regional and central government on policies and issues beyond Croydon's influence.

³ Defra. Air Pollution: Action in a Changing Climate, March 2010

RESPONSIBILITIES AND COMMITMENT

This AQAP was prepared by the pollution team, Place department of Croydon council with the support and agreement of the following officers and departments:

- Croydon Transport Services
- Strategic Transport team
- Public Health
- Healthy Schools
- Planning and Regeneration
- Procurement
- Housing

This AQAP will be subject to an annual review and appraisal of progress. Progress each year will be reported in the Annual Status Reports produced by Croydon, as part of our statutory London Local Air Quality Management duties.

The most recent version of our AQAP will be available on the council's website and also the Love Clean Air website (lovecleanair.org)

If you have any comments on this AQAP please send them to the Pollution Team at:

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Abbreviations

AQAP	Air Quality Action Plan
AQMA	Air Quality Management Area
AQO	Air Quality Objective
BEB	Buildings Emission Benchmark
CAB	Cleaner Air Borough
CAZ	Central Activity Zone
EV	Electric Vehicle
GLA	Greater London Authority
LAEI	London Atmospheric Emissions Inventory
LAQM	Local Air Quality Management
LLAQM	London Local Air Quality Management
NRMM	Non-Road Mobile Machinery
PM ₁₀	Particulate matter less than 10 micron in diameter
PM _{2.5}	Particulate matter less than 2.5 micron in diameter
TEB	Transport Emissions Benchmark
TfL	Transport for London

Introduction

This report outlines the actions that Croydon will deliver between 2017-2022 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 and relevant regulations made under that part and to meet the requirements of the London Local Air Quality Management statutory process⁴.

1 Summary of current air quality in Croydon

The UK Air Quality Strategy (AQS), released in July 2007, 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 AQS objectives take into account EU Directives that set limit values which member states are legally required to achieve by their target dates.

Croydon is meeting all of the national AQS objectives other than for the gas nitrogen dioxide (NO₂). Croydon is meeting the current objectives for particulate matter (PM₁₀ and PM_{2.5}) but as this pollutant is damaging to health at any level, this remains a pollutant of concern.

Croydon has five continuous air quality monitoring stations located in London Road, Norbury; Norbury Manor school, Norbury; Wellesley road / Park lane and at 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 <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 the Love Clean Air website (<http://lovecleanair.org/local-air/local-reporting/croydon-2/#>.)

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

Figure 1 Modelled map of annual mean NO₂ concentrations (from the LAEI 2013)

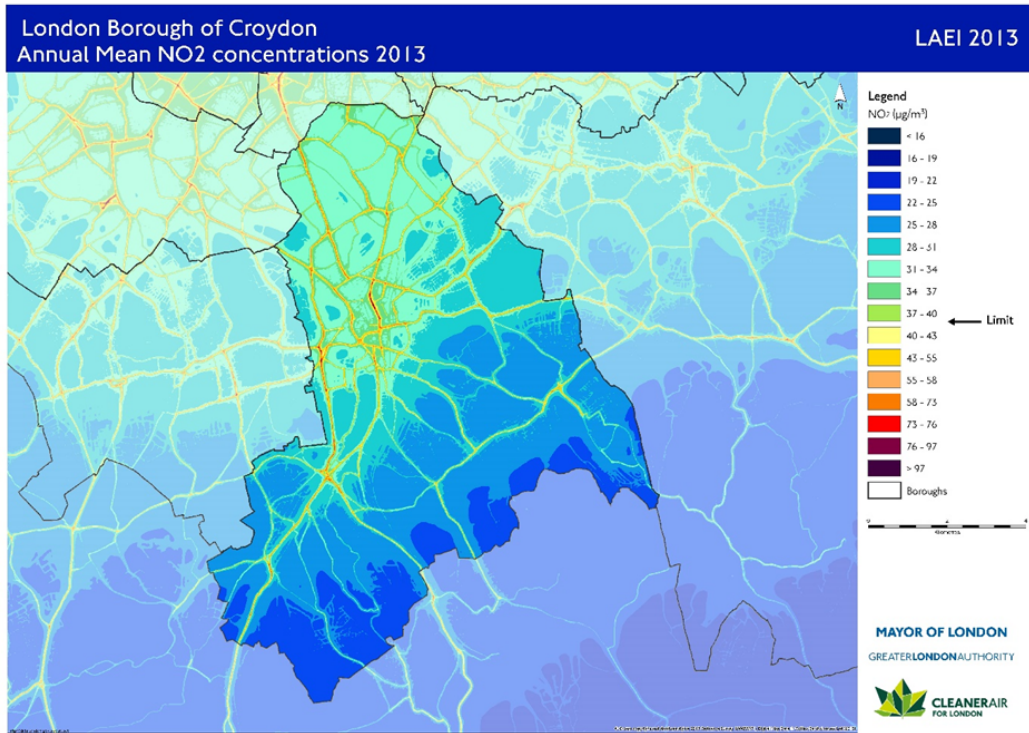


Figure 2 Modelled map of annual mean PM₁₀ (from the LAEI 2013)

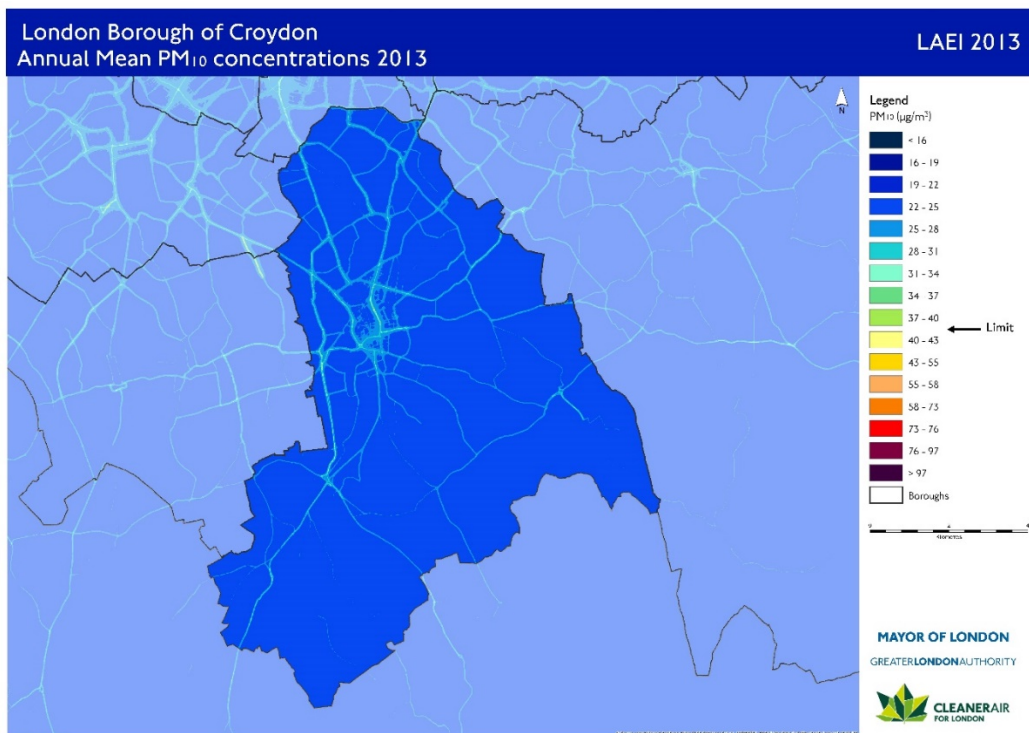
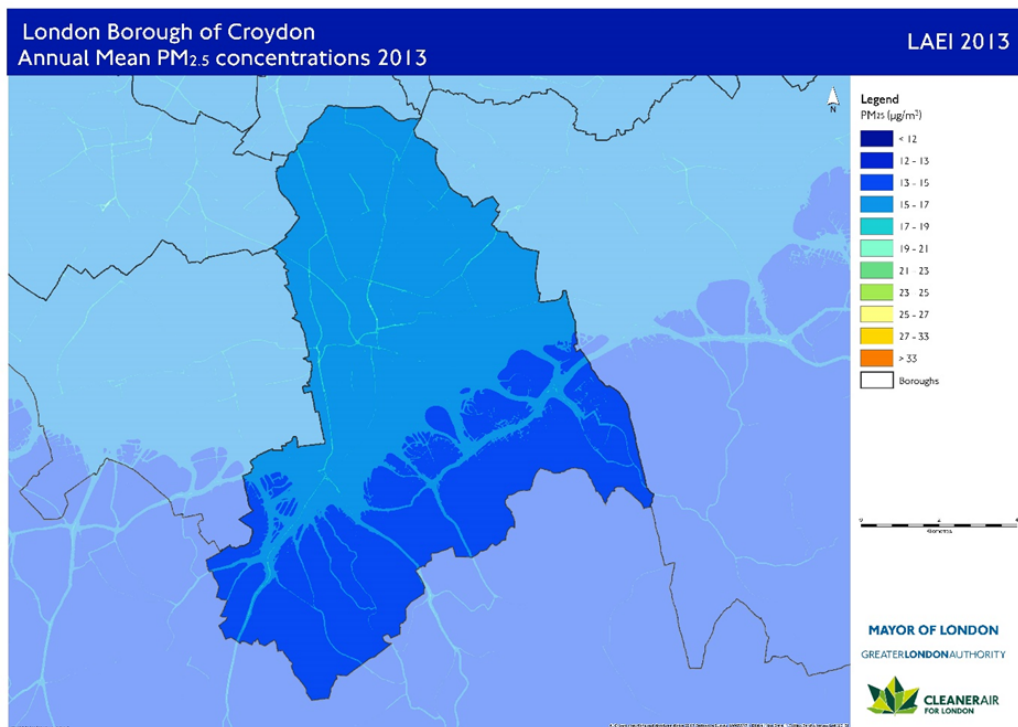


Figure 3 Modelled map of annual mean PM_{2.5} (from the LAEI 2013)



1.1 AQMAs and Focus areas

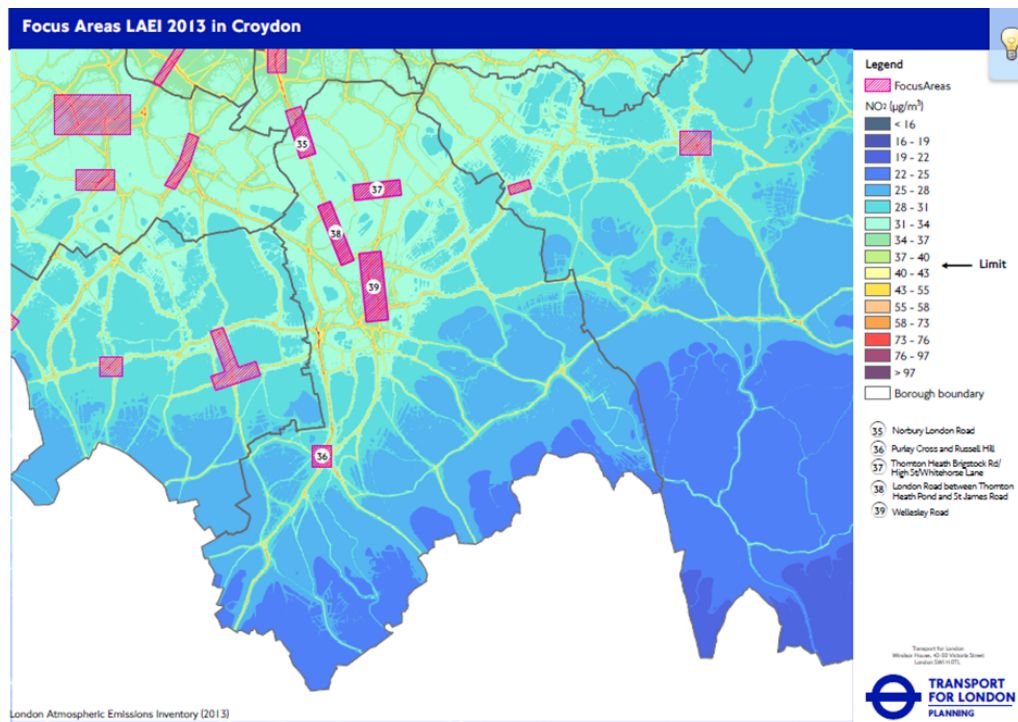
In Croydon an Air Quality Management Area (AQMA) has been declared for the whole of the borough.

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

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:

- London Road, Norbury
- Purley cross and Russell hill
- Thornton Heath / Brigstock road/ High street / Whitehorse lane
- London road between Thornton Heath pond and St James road
- Wellesley road

Figure 4 Modelled map of air quality focus areas (from the LAEI 2013)



1.2 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 NO₂ are road transport at 60% with domestic and commercial gas heating at 26.20%, and NRMM (non-road mobile machinery) at 6.5%. The main sources of particulate matter are road transport at 55.8%, resuspension at 27.3% and 5.9% from NRMM

Croydon has a number of industrial sources in the borough these are known as Part B processes, there are a total of 75 processes in Croydon, the majority are made up of dry cleaners, petrol stations, one crematorium, one cement batching plant and two vehicle resprayers. There is an aggregate site which is enforced by the Environment Agency. In addition there is one Part A process, a gas powered energy plan 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 developments occur and the residential, working and visiting population increases they can create more pollution which needs to be managed. The value of developments and associated infrastructure works in central Croydon is estimated to be over £5.25 billion and the Council is providing over £300m of funding, known as the Growth

Zone programme for transport, public realm and social infrastructure to enable and support this growth. Much of the funding will be spent on improvements to public transport and enhancement to the streets to encourage more walking and cycling. In addition, the Growth Zone will ensure a range of schemes are put in place to reduce the impact of the construction using measures such as implementing construction & logistics plans, providing HGV holding areas, using technology to manage and regulate the flow of construction traffic entering the town centre, enhanced signing and wayfinding measures and promoting electric and environmentally friendly vehicles.

Figure 5 NOx Emissions by source and vehicle type (from the LAEI 2013)

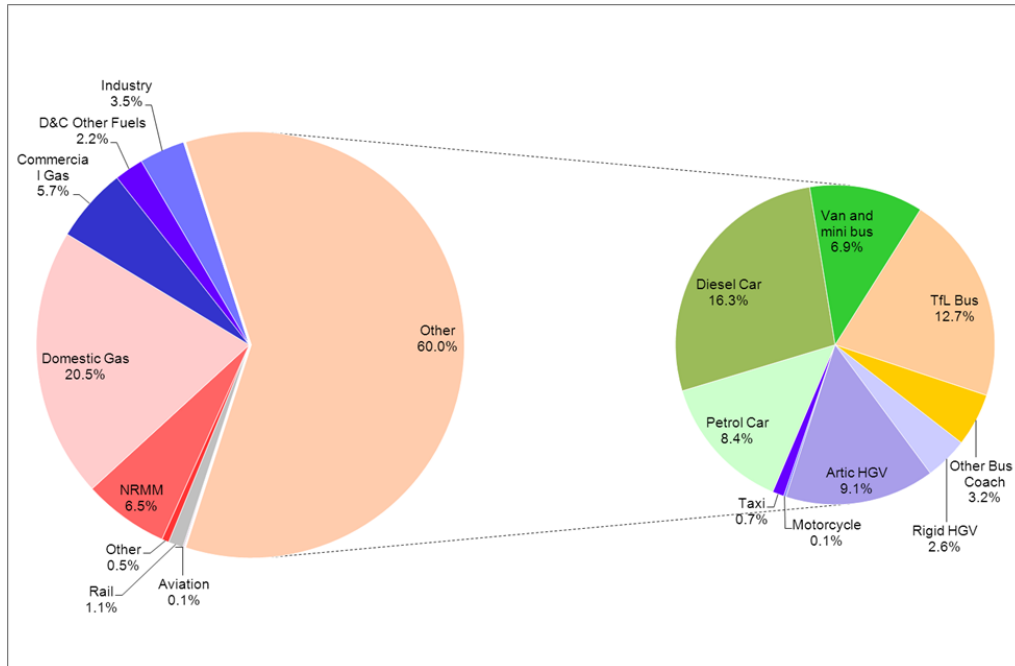


Figure 6 PM₁₀ Emissions by source and vehicle type (from the LAEI 2013)

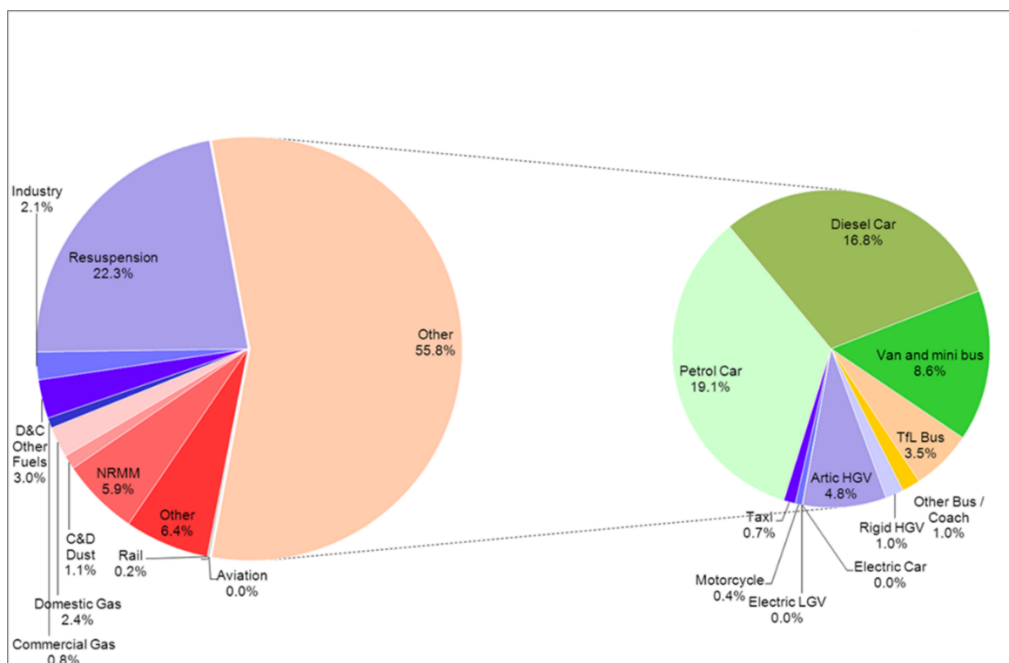
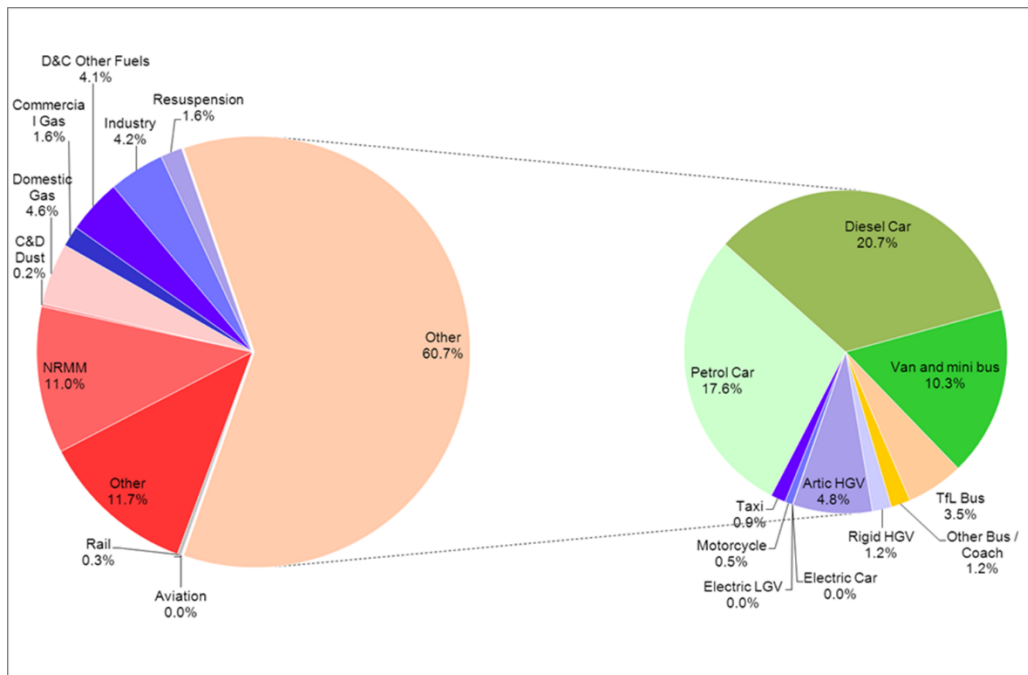


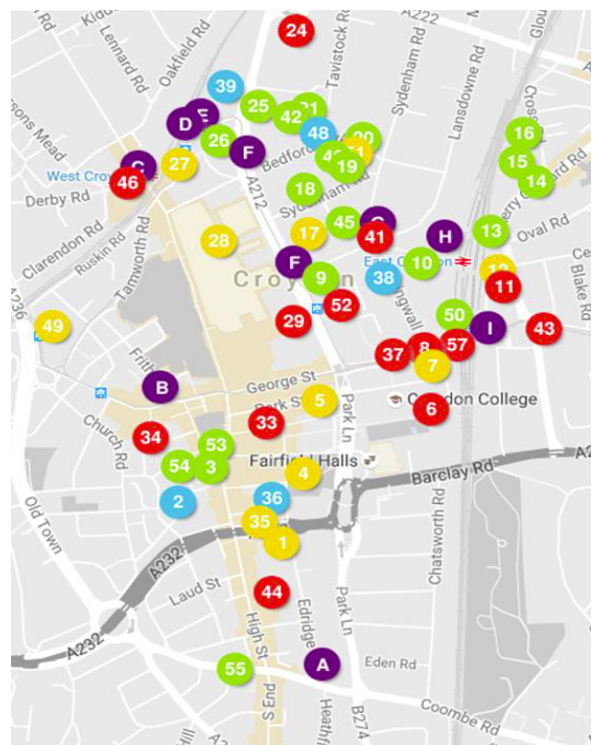
Figure 7 PM_{2.5} Emissions by source and vehicle type (from the LAEI 2013)



2 Croydon's Air Quality Priorities

In Croydon's Corporate plan the priorities set out are to create a welcoming, pleasant place in which local people want to live and work and to promote sustainable forms of transport and reducing reliance on the private car. This will bring environmental, social and health benefits. This action plan is aimed at delivering these priorities. The main air quality priorities are:

- Tackling emissions from construction sites and construction vehicles** through compliance with the Council's Town Centre Construction Logistics Plan. This includes setting up a construction consolidation centre to minimise congestion. Croydon town centre will see unprecedented development over the next few years with more than 50 developments proposed in central Croydon. The most significant risk to air quality are emissions produced by both construction sites and construction vehicles therefore a zonal CLP has been completed which sets out measures to manage, smooth, and communicate what is being done to ensure that existing visitors, residents and businesses in the town centre can continue to function. These actions are essential as we are to keep Croydon 'business as usual' during these works.



- Tackling emissions due to servicing and freight vehicles, Croydon in conjunction with Lambeth, Southwark and Wandsworth are working to improve air quality by reducing the number of delivery vehicles travelling in to the borough. 17% of transport emissions are from vehicles associated with delivery and servicing. We are working with local business and retailers to find out how their goods and services are delivered currently and in the future and what issues they expect to encounter. The first phase of the project was to assess Croydon's current deliveries and this has led to reduced deliveries from every day to two days per week which equals to a 60% reduction. The next phase of the project is to investigate the introduction of a freight consolidation centre.
- 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. By working with Public Health we want to raise awareness through school projects, local community projects and local businesses.

3 Development and Implementation of Croydon's AQAP

3.1 Stakeholder Engagement

In developing/updating the action plan we have worked with other local authorities, agencies, businesses and the local community to improve local air quality. We carried out the following stakeholder engagement:

- *Air quality summit*
- *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 lobby*
- *Screen in Access Croydon*

The first phase was an initial engagement / consultation exercise to discuss with residents, stakeholders etc to develop the actions to be included in the plan, which included the AQ summit. We wanted the opportunity to allow residents and local businesses to have say in development of the action plan. The plan has been updated to include the comments and recommendations. Under Schedule 11 of the Environment Act 1995 requires local authorities to consult the bodies listed in Table 3.1 and the draft air quality action plan will be sent out for 8 week consultation to those detailed below.

Table 3.1 Consultation to be undertaken for the final AQAP

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

3.2 Steering Groups:

- Air quality steering group to meet up every 3 months to discuss progress on action plan
- South London Freight Consolidation Update Meeting monthly to discuss progress with the Low Emission Logistics Project
- Town Centre Construction Logistics Forum – a bi-monthly forum brings together other teams and developers and businesses in Croydon
- Construction and Logistics Management Group – meets Bi-monthly

4 AQAP Progress

Table 4.1 shows Croydon's AQAP. It contains:

- a list of the actions that form part of the plan;
- the responsible individual and departments/organisations who will deliver this action;
- estimated cost to the council;
- expected benefit in terms of emissions and concentration reduction;
- the timescale for implementation; and
- how progress will be monitored.

Table 4.1 Air Quality Action Plan

The actions have been grouped into six categories: Emissions from developments and buildings; Public health and awareness raising; Delivery servicing and freight; Borough fleet actions; Localised solutions; and Cleaner transport.

Action category	Action ID	Action description	Responsibility	Cost	Expected emissions/ concentration s benefit	Timescale for implementation	How implementation will be monitored	Further information
Emissions from developments and buildings	1	Visit construction sites to ensure emissions from construction are minimised	London Borough of Croydon Pollution Team Planning Enforcement	Existing Pollution Team budget Officer time Currently funded by LIP £35,000 & Growth Zone £10,000	Benefits potentially significant but unquantifiable	Implementation ongoing	Officer visits to confirm compliance. Enforcement visits when complaints received. Update in Annual Statistics Report	Compliance with Planning conditions and compliance with the Council's Construction Code of Practice / Logistics Plan and the Council's zonal construction logistics plan
Emissions from developments and buildings	2	Monitor air quality at construction sites to ensure emissions are minimised	London Borough of Croydon Pollution Team Planning Enforcement	Existing Pollution Team budget Officer time Currently funded by LIP £35,000 & Growth Zone £10,000	Benefits potentially significant but unquantifiable	Implementation ongoing	Air quality monitoring when required. Update in Annual Status Report	Compliance with Planning conditions and compliance with the Council's Construction Code of Practice / Logistics Plan and the Council's zonal construction logistics plan

Emissions from developments and buildings	3	Ensuring enforcement of Non Road Mobile Machinery (NRMM) air quality policies through officer visits	London Borough of Croydon Pollution Team Planning enforcement	Existing Pollution Team budget	Benefits potentially significant and will be evaluated reported in the annual status report	Implementation ongoing	Officer visits to confirm compliance. Enforcement visits when complaints received. Evaluation will be undertaken and updated in Annual Status Report	Compliance with Planning conditions and compliance with the Council's Construction Code of Practice / Logistics Plan and the Council's zonal construction logistics plan
Emissions from developments and buildings	4	Ensuring enforcement of Non Road Mobile Machinery (NRMM) air quality policies through monitoring air quality	London Borough of Croydon Pollution Team Planning enforcement	Existing Pollution Team budget	Benefits potentially significant and will be evaluated reported in the annual status report	Implementation ongoing	Air quality monitoring when required. Evaluation will be undertaken and updated in Annual Status Report	Compliance with Planning conditions and compliance with the Council's Construction Code of Practice / Logistics Plan and the Council's zonal construction logistics plan
Emissions from developments and buildings	5	Enforcing CHP and biomass air quality policies	London Borough of Croydon Planning Team Pollution Team	Existing Pollution Team budget Officer time	Benefits potentially significant but unquantifiable	Implementation ongoing	Planning application / conditions Update in the annual status report	Compliance with the Council's Interim Policy Guidance on air quality
Emissions from developments and buildings	6	Enforcing Air Quality Neutral / Positive policies	London Borough of Croydon Planning Team Pollution Team	Existing Pollution Team budget Officer time	Benefits potentially significant but unquantifiable	Implementation ongoing	Planning application / conditions Update in Annual	Compliance with the Council's Interim Policy Guidance on air quality

							Status Report	
Emissions from developments and buildings	7	<p>Ensuring adequate, appropriate, and well located green space and infrastructure is included in new developments.</p> <p>Proposed Options: To ensure the Local Plan refers to the most up to date policy in the London Plan.</p> <p>To review this in a year</p>	London Borough of Croydon Strategic Planning Pollution Team	Existing Pollution Team budget Officer time	Benefits potentially significant but unquantifiable	Review 2018/19	<p>Planning application / conditions</p> <p>Update in Annual Status Report</p>	
Emissions from developments and buildings	8	<p>Ensuring that Smoke Control Zones are appropriately identified and fully promoted and enforced.</p> <p>Only half the borough has been designated a smoke control zone and there is a need to consider options to extend the area to the whole of the borough.</p> <p>Proposed Option: The proposed action is to consider the revision of the current smoke control order to cover the whole of the borough, subject to the necessary evidentiary basis and consultation</p>	London Borough of Croydon Pollution Team Legal Team	Existing Pollution Team budget Officer time	Medium AQ benefit	<p>Initial Assessment to be carried out April 2018</p> <p>Implementation to be considered following further consultation process</p>	<p>Annual Status Report</p> <p>Air quality steering group</p>	

		requirements being complied with.						
Emissions from developments and buildings	9	Installation of Ultra Low Nox boilers Proposed Option: Review procurement policy regarding replacing boilers in Council buildings, maintained schools and Council housing properties with ultra low NO _x boilers as part of a replacement programme	London Borough of Croydon Pollution Team Commissioning & procurement team District Centres and Regeneration Department	TBC	Medium AQ benefit	Ongoing	Update in Annual Status Report AQ Steering group	
Planning Policy	10	Supplementary Planning Document for Air Quality To ensure the Local Plan refers to the most up to date policy in the London Plan. To include the provision of green infrastructure for new schools on busy roads Review in a year	London Borough of Croydon Strategic Planning Pollution Team	Existing Pollution Team budget Officer time	Benefits potentially significant but unquantifiable	Review March 2019	Update in Annual Status Report AQ Steering group	
Planning Policy	11	Supplementary Planning Document for Air Quality To ensure the Local Plan refers to the most up to date policy in the London Plan.	London Borough of Croydon Strategic Planning Pollution Team	Existing Pollution Team budget Officer time	Benefits potentially significant but unquantifiable	Review March 2019	Update in Annual Status Report AQ Steering group	

		To include a requirement for construction sites to utilise new technology for diesel generators. Review in a year.						
Public health and awareness raising	12	Ensure that Directors of Public Health (DsPHs) have been fully briefed on the scale of the problem in your local authority area; what is being done, and what is needed. A briefing should be provided. Scrutiny Report provided to PH Regular updates provided when required	London Borough of Croydon Pollution Team Croydon Public Health Team	Existing Pollution Team budget Officer time	Benefits potentially significant but unquantifiable	Scrutiny report approved. Quarterly meetings with PH to discuss progress	Update in Annual Status Report & AQ steering group	
Public health and awareness raising	13	Public Health Teams should be supporting engagement with local stakeholders (businesses, schools, community groups and healthcare providers). They should be asked for their support via the DsPH when projects are being developed.	London Borough of Croydon Pollution Team Croydon Public Health Team	Existing Pollution Team budget Officer time	Benefits potentially significant but unquantifiable	Ongoing part of the current consultation process	Update in Annual Status Report & AQ steering group	
Public health and awareness raising	14	Director of Public Health to have responsibility for ensuring their Joint Strategic Needs Assessment (JSNA) has up to date information	London Borough of Croydon Croydon Public Health Team Pollution Team	Existing Pollution Team budget Officer time	Benefits potentially significant but unquantifiable	TBC	Update in Annual Status Report & AQ steering group	

		on air quality impacts on the population Proposed Option: To include air pollution data to the list of PHOF indicators which are reviewed at senior management/cabinet level.						
Public health and awareness raising	15	Strengthening co-ordination with Public Health by ensuring that at least one Consultant-grade public health specialist within the borough has air quality responsibilities outlined in their job profile	London Borough of Croydon Pollution Team Croydon Public Health Team	Existing Pollution Team budget Officer time	Benefits potentially significant but unquantifiable	TBC	AQ Steering group	
Public health and awareness raising	16	Director of Public Health to sign off Statutory Annual Status Reports and all new Air Quality Action Plans	London Borough of Croydon Pollution Team Croydon Public Health Team	Existing budget	Benefits potentially significant but unquantifiable		Update in Annual Status report & AQ Steering group	
Public health and awareness raising	17	Ensure that the Head of Transport has been fully briefed on the Public Health duties and the fact that all directors (not just Director of Public Health) are responsible for delivering them, as well as on air quality opportunities and risks related to transport in the borough. Provide a	London Borough of Croydon Pollution Team Planning and Strategic Transport Croydon Public Health Team	Existing budget	Benefits potentially significant but unquantifiable		Update in Annual Status report Briefings provided AQ Steering Group AQ Steering group	

		briefing which can be disseminated amongst the Transport team.						
Public health and awareness raising	18	Promotion of availability of airTEXT Provision of airTEXT information for wider dissemination and to provide information on health effects of air pollution and actions being taken to reduce emissions and exposure through engagement with public health leads, CCG and other health professionals	London Borough of Croydon Pollution Team Croydon Public Health Team Cambridge Environmental Research airTEXT consortium	Low cost £1,000 per annum (text messages) To see long term sustainable funding	Low AQ benefit	Ongoing	Update in Annual Status report airTEXT consortium	
Public health and awareness raising	19	Expand the airTEXT service to provide information on health effects of air pollution and actions being taken to reduce emissions and exposure through engagement with public health leads, CCG and other health professionals	London Borough of Croydon Pollution Team Croydon Public Health Team Cambridge Environmental Research airTEXT consortium	Low cost £1,000 per annum (text messages) To see long term sustainable funding	Low AQ benefit	Ongoing	Update in Annual Status report airTEXT consortium	
Public health and awareness raising	20	Encourage schools to join the TfL STARS accredited travel planning programme by providing information on the benefits to schools and supporting the implementation of such a programme	London Borough of Croydon Pollution Team Healthy Schools Planning and Strategic Transport	Low cost	Medium AQ benefit	To encourage 80% of schools to sign up to the TfL STARS scheme by 2018/2019	Update in Annual Status report AQ Steering group	

Public health and awareness raising	21	Air quality at schools Promote sustainable travel to schools - working with schools to implement packages of measures to reduce pollution and minimise exposure	London Borough of Croydon Pollution Team Healthy Schools Planning and Strategic Transport	Low cost TBC	Medium AQ benefit	Ongoing	5 schools per year Annual Status report AQ steering group	
Public health and awareness raising	22	Air quality at schools To continue Clean air 4 Schools project. Target 5 schools each year. Train Travel Plan champions at schools to promote sustainable travel and carryout idling vehicle checks	London Borough of Croydon Pollution Team Healthy Schools Planning and Strategic Transport	Low cost TBC	Medium AQ benefit	Ongoing	5 schools per year Annual Status report AQ steering group	
Public health and awareness raising	23	Cleaner Air Champions This project delivers a comprehensive volunteer programme to help tackle air quality issues by empowering local people to raise awareness and understanding of problems around air quality in London and promoting activities that people can undertake to help improve their local air quality. Proposed option Support through funding to deliver a volunteer	London Borough of Croydon Pollution Team Healthy Schools Croydon Public Health Team	Medium cost	Medium AQ benefit	2018/19	Annual status report AQ steering group	

		programme to tackle local air quality measures. Funding will be sought through DEFRA, MAQS and section 106						
Delivery servicing and freight	24	<p>To review policies to ensure sustainable logistical measures are implemented (and include requirements for preferentially scoring bidders based on their sustainability criteria)</p> <p>Action:</p> <p>To agree a policy statement and evaluation criteria. Would require 1 year to review the current contracts and agree a policy statement.</p>	London Borough of Croydon Pollution Team Commissioning and Procurement Team Strategic Transport team	Existing budgets	Benefits potentially significant but unquantifiable at present to be reviewed	208/19	Annual status report AQ steering group	
Delivery servicing and freight	25	<p>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>Ongoing - Low Emission Logistics</p>	London Borough of Croydon, Lambeth, Southwark and Wandsworth – Low Emission Logistics Pollution Team Strategic Transport team	<p>Medium to high cost</p> <p>Some funding already available from MAQFs</p> <p>Future funding to be sought (TfL/ LiP)</p>	Medium – High AQ benefits	Ongoing	So far 60% reduction in delivery from one source achieved.	

		project. So far 60% reduction in delivery from one source achieved						
Delivery servicing and freight	26	<p>Re-organisation of freight to support consolidation (or micro-consolidation) of deliveries, by expanding the above action.</p> <p>Proposed Option: Following completion of feasibility study to consider part funding with other South London Boroughs</p>	<p>London Borough of Croydon, Lambeth, Southwark and Wandsworth – Low Emission Logistics</p> <p>Pollution Team Strategic Transport team</p>	<p>Medium to high cost</p> <p>Some funding already available from MAQFs</p> <p>Future funding to be sought (TfL/ LiP)</p>	Medium – High AQ benefits	Ongoing	<p>Feasibility study to consider part funding with other South London boroughs to deliver a Freight Consolidation Centre.</p> <p>Review at LEL working group & Annual status report</p>	
Delivery servicing and freight	27	Retiming of deliveries and servicing to be undertaken outside peak hours	London Borough of Croydon Pollution Team	Existing budget	Benefits potentially significant but unquantifiable	Ongoing working with TfL working group on retiming deliveries	Review in annual status report	
Borough fleet actions	28	Develop options for the implementation of FORS Bronze for the Council's Passenger Transport operations.	<p>London Borough of Croydon</p> <p>Pollution Team</p> <p>Croydon Transport Services</p>	Officer time (CTS and service managers who have fleet responsibilities)	<p>Benefits potentially significant.</p> <p>Validation assessment to be carried out to quantify benefits</p>	<p>Options developed and agreed by January 2018</p> <p>Milestone dates from</p>	<p>Council fleet and hired fleet to meet Quality Standard</p> <p>Review milestone</p>	Develop options for the implementation of FORS Bronze for the Council's Passenger Transport operations.

		Other Operational services to follow this pilot project	All services which currently have fleet vehicles – either owned or leased	£5,700 for registration fee + 12 audits		implementation plan	dates at Annual status report & AQ Steering group	Other Operational services to follow this pilot project
Borough fleet actions	29	To review procurement policies to consider including a requirement for suppliers with large fleets to have attained Fleet Operator Recognition Scheme (FORS) accreditation	Corporate procurement Services with external contracts that have fleet requirements Croydon Transport Services Strategic Transport team	There will be cost implications per contract let. To be assessed during review process	Benefits potentially significant. Validation assessment to be carried out to quantify benefits	To be reviewed	Review at Annual status report & AQ Steering group	
Borough fleet actions	30	Increasing the number of hydrogen, electric, hybrid, bio-methane and cleaner vehicles in the boroughs' fleet Proposed Options: To work towards a zero diesel fleet, following recommendations:	London Borough of Croydon Pollution Team Croydon Transport Services Strategic Transport team Commissioning and procurement Team	Medium / High Cost	High AQ benefit	To require 25% of council fleet / hired fleet to be ultra-low emission capable (i.e. electric, hybrid) by 2019 To require 75% of council	Review at Annual status report & AQ Steering group	

						fleet / hired fleet to be ultra low emission capable (i.e. electric, hybrid) by 2025		
Borough fleet actions	31	Accelerate uptake of new Euro VI vehicles in borough fleet.	London Borough of Croydon Pollution Team Croydon Transport Services Strategic Transport team Commissioning and procurement Team	Medium / High Cost	High AQ benefit	All council fleet and hired fleet vehicles to meet Euro VI emission standards by 2019 in line with the Mayor's ULEZ	Review at Annual status report & AQ Steering group	
Borough fleet actions	32	Smarter Driver Training for drivers of vehicles in Borough Own Fleet i.e. through training of fuel efficient driving and providing regular re-training of staff	Travel demand management programme for the Town centre	TBC	Benefits potentially significant assessment to be carried out on the potential benefits	TBC	Review at Annual status report & AQ Steering group	
Localised solutions	33	Green Infrastructure Proposed Option: To install more green infrastructure along pavements to encourage more people to walk and cycle	London Borough of Croydon Pollution Team Planning Healthy Schools	Medium – high cost	Medium AQ benefit	TBC	Review at Annual status report & AQ Steering group	
Localised solutions	34	Green Infrastructure Proposed Option:	London Borough of Croydon	Medium – high cost	Medium AQ benefit	TBC	Review at Annual status	

		To seek funding to install green screens at a number of existing schools.	Pollution Team Planning Healthy Schools				report & AQ Steering group	
Localised solutions	35	Green Infrastructure Proposed Option: To investigate providing more pocket parks in Croydon	London Borough of Croydon Pollution Team Planning Healthy Schools	Medium – high cost	Medium AQ benefit	TBC	Review at Annual status report & AQ Steering group	
Localised Solutions	36	Bonfires have been identified as a contributing factor to emissions of smoke and other pollutants. All of these pollutants can have health impacts, especially for people with breathing difficulties and those with heart problems. A typical garden bonfire will emit 2.8kg of particulate matter, 25kg of carbon monoxide, and 4.25kg of volatile compounds. Proposed option: Ban on residential bonfires between 6am and sunset This option considers the restriction of residential bonfires to times where they will have a minimal impact upon others.	London Borough of Croydon Pollution Team	Low cost Existing budget for officer time and costs of Communications	Medium AQ benefit	2018/19	Review at Annual status report & AQ Steering group	

Localised Solutions	37	<p>Bonfires:</p> <p>Action Once the above action has been implemented to review after 2 years to assess the effectiveness of the action.</p>	London Borough of Croydon Pollution Team	Low cost Existing budget for officer time and costs of Communications	Medium AQ benefit	2020/21	Review at Annual status report & AQ Steering group	
Engagement with businesses	38	<p>Ecostars for Private Hire Vehicles (PHVs)</p> <p>The aim of the scheme is to have a positive impact on local air quality by supporting and encouraging operators of PHV's to reduce harmful NO2 emissions by reviewing operational fleet vehicles and management practices and advising on efficiency and environmental improvements</p> <p>In addition the scheme reduces PM and CO2 emissions from vehicles and has economic benefit to vehicle operators.</p> <p>Proposed Option: Set up Ecostars in Croydon to encourage PHVs to be cleaner and greener by 2025 and to</p>	London Borough of Croydon Pollution Team	Medium cost	Medium AQ benefit	Set up Ecostars in Croydon to encourage PHVs to be cleaner and greener by 2025 and to encourage the take up of diesel free vehicles	Review at Annual status report & AQ Steering	

		encourage the take up of diesel free vehicles						
Cleaner transport	39	Discouraging unnecessary idling by taxis, coaches and other vehicles (e.g. through anti-idling campaigns or enforcement activity) Use of vehicle idling powers where appropriate and awareness raising of increased pollution through vehicle idling Proposed Option: Carry out idling vehicle awareness campaign at hotspot areas such as taxi ranks and bus stands and schools	London Borough of Croydon Pollution Team	Low cost	Medium AQ benefit Quantification of benefits to be investigated	Carry out idling vehicle awareness raising at hotspot areas such as taxi ranks and bus stands and schools - ongoing	Review at Annual status report & AQ Steering	
Cleaner transport	40	Speed control measures e.g. lowering the legal speed limit to 20mph in built up residential areas Current proposal is to take 20mph limits to three remaining areas of the borough – North-west, South-east and South-west Croydon.	London Borough of Croydon Highways improvements Strategic Transport team	£1,000,000	Benefits potentially significant but unquantifiable	Timescales are for the area 3, 4 and 5 to be decided upon at the TMAC meeting in May 2017 and completion of all the remaining areas by May of 2018.	Review at Annual status report & AQ Steering	
Cleaner transport	41	Increasing the proportion of electric,	London Borough of Croydon	TBC	Benefits potentially	15-16 continuing	Review at Annual status	

		hydrogen and ultra low emission vehicles in Car Clubs	Strategic transport team		significant but unquantifiable	identification on new developments in accordance with the London plan In future looking how to provide more public car club bays with electric charging points	report & AQ Steering	
Cleaner transport	42	Very Important Pedestrian Days (e.g. no vehicles on certain roads on a Sunday) and similar initiatives	London Borough of Croydon Strategic transport Pollution Team	Medium cost	Benefits potentially significant but unquantifiable	Support local communities to increase the number of pedestrian days in the Borough via Air Quality Champions 2018/19	Review at Annual status report & AQ Steering	
Cleaner transport	43	Installation of residential electric charge points	London Borough of Croydon Strategic Transport	TBC	Benefits potentially significant but unquantifiable	Installation of public and residential electric charge points Croydon will be extending the network of public charging points for electric cars and vans,	Review at Annual status report & AQ Steering	

						having signed the 'Source London' network agreement with Blue Point London in October 2017. A first 30 locations are planned for installation by 2019 and another 30-50 by 2022. Other government grants and Section 106 planning or Local Implementation Plan funds to contribute to charging points in residential roads without off-street parking.		
Cleaner transport	44	Installation of rapid chargers to help enable the take up of electric taxis, cabs and commercial vehicles (in partnership with TfL and/or OLEV)	London Borough of Croydon Strategic Transport	TBC	Benefits potentially significant but unquantifiable	There are currently two rapid charging points. A further 3-4 public sites are to be installed by early 2018, subject to approval, with	Review at Annual status report & AQ Steering	

						a further 5-10 likely by 2022.		
Cleaner transport	45	Trial ultra low emission vehicles in commercial setting	London Borough of Croydon and Sutton Transport Team	TBC	Benefits potentially significant but unquantifiable	Croydon and Sutton have been awarded additional money as part of the Go Ultra Low City scheme to provide five electric vans and trucks. Confirmed for 2017-18	Review at Annual status report & AQ Steering	
Cleaner transport	46	Reprioritisation of road space; reducing parking at some destinations and or restricting parking on congested high streets and A roads to improve bus journey times, cycling experience, and reduce emissions caused by congested traffic.	London Borough of Croydon Transport	TBC	Benefits potentially significant but unquantifiable	This project is ongoing and will proceed to other main routes focusing on the main east-west and north-south routes including any new Quietways.	Review at Annual status report & AQ Steering	

Cleaner transport	47	Cycle Route Signs Road signs are being put up for cycle routes from the Infrastructure Delivery Plan. First part completed January 2017 – “Avenue Verte” – part of the London Paris route	London Borough of Croydon Transport	TBC	Benefits potentially significant but unquantifiable	Cycle Route Improvements Road improvements for walking and cycling routes are being identified and an implementation schedule is being drawn up - TBC	Review at Annual status report & AQ Steering	
Cleaner transport	48	Provision of infrastructure to support walking and cycling Cargo Trikes The Croydon BID Ambassadors, and enterprises are due to be loaned a branded cargo trike for three years. The aim is to demonstrate the viability of these zero-emission delivery vehicles and provide a visible presence of cycling around the town	London Borough of Croydon Transport	TBC	Benefits potentially significant but unquantifiable	2018	Review at Annual status report & AQ Steering	
Cleaner transport	49	On-street cycle storage A phased programme of installing Sheffield stands on the street in key locations. (Implementation TBC)	London Borough of Croydon Transport	TBC	Benefits potentially significant but unquantifiable	TBC	Review at Annual status report & AQ Steering	

Cleaner transport	50	Off-street cycle storage Sites are being identified on the LBC housing estates and at pubs, cafes and other destinations with public access for cycle storage, including Sheffield stands, sheds and secure hangers. A larger programme will be drawn up once these are in place. (Implementation date TBC)	London Borough of Croydon Transport	TBC	Benefits potentially significant but unquantifiable	TBC	Review at Annual status report & AQ Steering	
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Appendix A Response to Engagement

Appendix B: Air quality survey results

599 respondents accessed the campaign

Step 1:1.00-1:

How important do you think the issue of air quality is in Croydon?

This single response question was answered by 356 respondents.

Response	Number of Respondents	Percentage of Respondents
Not important	10	2.81%
Fairly important	25	7.02%

Important	49	13.76%
Very important	269	75.56%
Don't know	3	0.84%

Step 1:2.00-1:

How strongly do you agree or disagree that the following measures are included in the planning process to improve air quality?

(Development of supplementary guidance for developers to improve air quality)

This single response question was answered by 334 respondents.

Response	Number of Respondents	Percentage of Respondents
Strongly agree	156	46.71%
Agree	107	32.04%
Neither agree nor disagree	51	15.27%
Disagree	5	1.50%
Strongly disagree	15	4.49%

Step 1:2.00-2:

How strongly do you agree or disagree that the following measures are included in the planning process to improve air quality?

(Incorporation of green infrastructure (such as trees, plant walls/screens) into new developments)

This single response question was answered by 334 respondents.

Response	Number of Respondents	Percentage of Respondents
Strongly agree	229	68.56%
Agree	69	20.66%
Neither agree nor disagree	13	3.89%
Disagree	12	3.59%
Strongly disagree	11	3.29%

Step 1:2.00-3:

How strongly do you agree or disagree that the following measures are included in the planning process to improve air quality?

(Continued improvement of control of dust, smoke and emissions at construction sites)

This single response question was answered by 334 respondents.

Response	Number of Respondents	Percentage of Respondents
Strongly agree	204	61.08%
Agree	88	26.35%
Neither agree nor disagree	19	5.69%
Disagree	11	3.29%
Strongly disagree	12	3.59%

Step 1:2.00-4:

How strongly do you agree or disagree that the following measures are included in the planning process to improve air quality?

(Reduction of emissions from freight deliveries)

This single response question was answered by 334 respondents.

Response	Number of Respondents	Percentage of Respondents
Strongly agree	212	63.47%
Agree	71	21.26%

Neither agree nor disagree	24	7.19%
Disagree	13	3.89%
Strongly disagree	14	4.19%

Step 1:3.00-1:

Smoke control zones are areas in which only certain types of fuel or exempt appliances can be used. In Croydon, only the northern half of the borough has been designated a smoke control zone. We are proposing to extend the zone to the whole of the borough in line with Croydon's Air Quality Management Area.

How strongly do you agree or disagree that the smoke control zone should be extended across the whole borough?

This single response question was answered by 326 respondents.

Response	Number of Respondents	Percentage of Respondents
Strongly agree	163	50%
Agree	73	22.39%
Neither agree nor disagree	41	12.58%

Disagree	17	5.21%
Strongly disagree	32	9.82%

Step 1:4.00-1:

How strongly do you agree or disagree with the council undertaking the following awareness raising and engagement projects?

(Provide air pollution alerts)

This single response question was answered by 322 respondents.

Response	Number of Respondents	Percentage of Respondents
Strongly agree	177	54.97%
Agree	89	27.64%
Neither agree nor disagree	41	12.73%
Disagree	7	2.17%
Strongly disagree	8	2.48%

Step 1:4.00-2:

How strongly do you agree or disagree with the council undertaking the following awareness raising and engagement projects?

(Improve air quality awareness at schools)

This single response question was answered by 322 respondents.

Response	Number of Respondents	Percentage of Respondents
Strongly agree	180	55.90%
Agree	92	28.57%
Neither agree nor disagree	32	9.94%
Disagree	12	3.73%
Strongly disagree	6	1.86%

Step 1:4.00-3:

How strongly do you agree or disagree with the council undertaking the following awareness raising and engagement projects?

(Provide cleaner air champions that raise awareness of air quality in the community)

This single response question was answered by 322 respondents.

Response	Number of Respondents	Percentage of Respondents
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Strongly agree	126	39.13%
Agree	78	24.22%
Neither agree nor disagree	73	22.67%
Disagree	31	9.63%
Strongly disagree	14	4.35%

Step 1:5.00-1:

How strongly do you agree or disagree with the council taking measures to clean their own vehicle fleet and contractor fleet by setting tighter emission limits for new vehicles?

This single response question was answered by 318 respondents.

Response	Number of Respondents	Percentage of Respondents
Strongly agree	216	67.92%
Agree	69	21.70%
Neither agree nor disagree	20	6.29%
Disagree	8	2.52%

Strongly disagree

5

1.57%

Step 1:6.00-1:

Bonfires create substantial amounts of smoke and other pollutants. We are considering various options to control bonfires. Which of the following options do you think the council should choose? (There will be exemptions for cultural events)

(Ban between 6am and 8pm)

This single response question was answered by 312 respondents.

Response	Number of Respondents	Percentage of Respondents
Yes	173	55.45%
No	106	33.97%
Don't Know	33	10.58%

Step 1:6.00-2:

Bonfires create substantial amounts of smoke and other pollutants. We are considering various options to control bonfires. Which of the following options do you think the council should choose? (There will be exemptions for cultural events)

(Complete ban)

This single response question was answered by 313 respondents.

Response	Number of Respondents	Percentage of Respondents
Yes	113	36.10%
No	170	54.31%
Don't Know	30	9.58%

Step 1:6.00-3:

Bonfires create substantial amounts of smoke and other pollutants. We are considering various options to control bonfires. Which of the following options do you think the council should choose? (There will be exemptions for cultural events)

(Take no action)

This single response question was answered by 312 respondents.

Response	Number of Respondents	Percentage of Respondents
Yes	58	18.59%
No	225	72.12%
Don't Know	29	9.29%

Step 1:7.00-1:

The idling of engines when stationary contributes to local air pollution and damages people’s health. We are running events to educate people about the issues of idling and encouraging motorists to switch of when stationary.

How strongly do you agree with the council taking this action at hot spot locations such as schools, taxis and bus stands within the borough?

This single response question was answered by 311 respondents.

Response	Number of Respondents	Percentage of Respondents
Strongly agree	197	63.34%
Agree	67	21.54%
Neither agree nor disagree	25	8.04%
Disagree	15	4.82%
Strongly disagree	7	2.25%

Step 1:8.00-1:

The healthy streets initiative includes many proposals such as walking, cycling, and planting of trees and green screens to encourage people to walk and cycle more and to improve people’s health.

How strongly do you agree or disagree with the council's proposals to make Croydon's streets healthier?

This single response question was answered by 310 respondents.

Response	Number of Respondents	Percentage of Respondents
Strongly agree	208	67.10%
Agree	65	20.97%
Neither agree nor disagree	23	7.42%
Disagree	7	2.26%
Strongly disagree	7	2.26%

Table A.1 Summary of Responses to Consultation and Stakeholder Engagement on the AQAP (this will be updated to include the results of the consultation in the final action plan)

Consultee	Category	Response
<i>e.g. Chamber of Commerce</i>	<i>Business</i>	<i>e.g. Disagree with plan to remove parking on High Street in favour of buses and cycles; consider it will harm business of members.</i>

Appendix B Reasons for Not Pursuing Action Plan Measures

Table B.1 Action Plan Measures Not Pursued and the Reasons for that Decision (this will be updated to include the results of the consultation in the final action plan)

Action category	Action description	Reason action is not being pursued (including Stakeholder views)
Emissions from developments and buildings	<i>Complete table for all Action Matrix measures that will not be pursued.</i>	<i>Add a 2-3 sentence summary for each action</i>
Public health and awareness raising		
Delivery servicing and freight		
Borough fleet actions		
Localised solutions		
Cleaner transport		