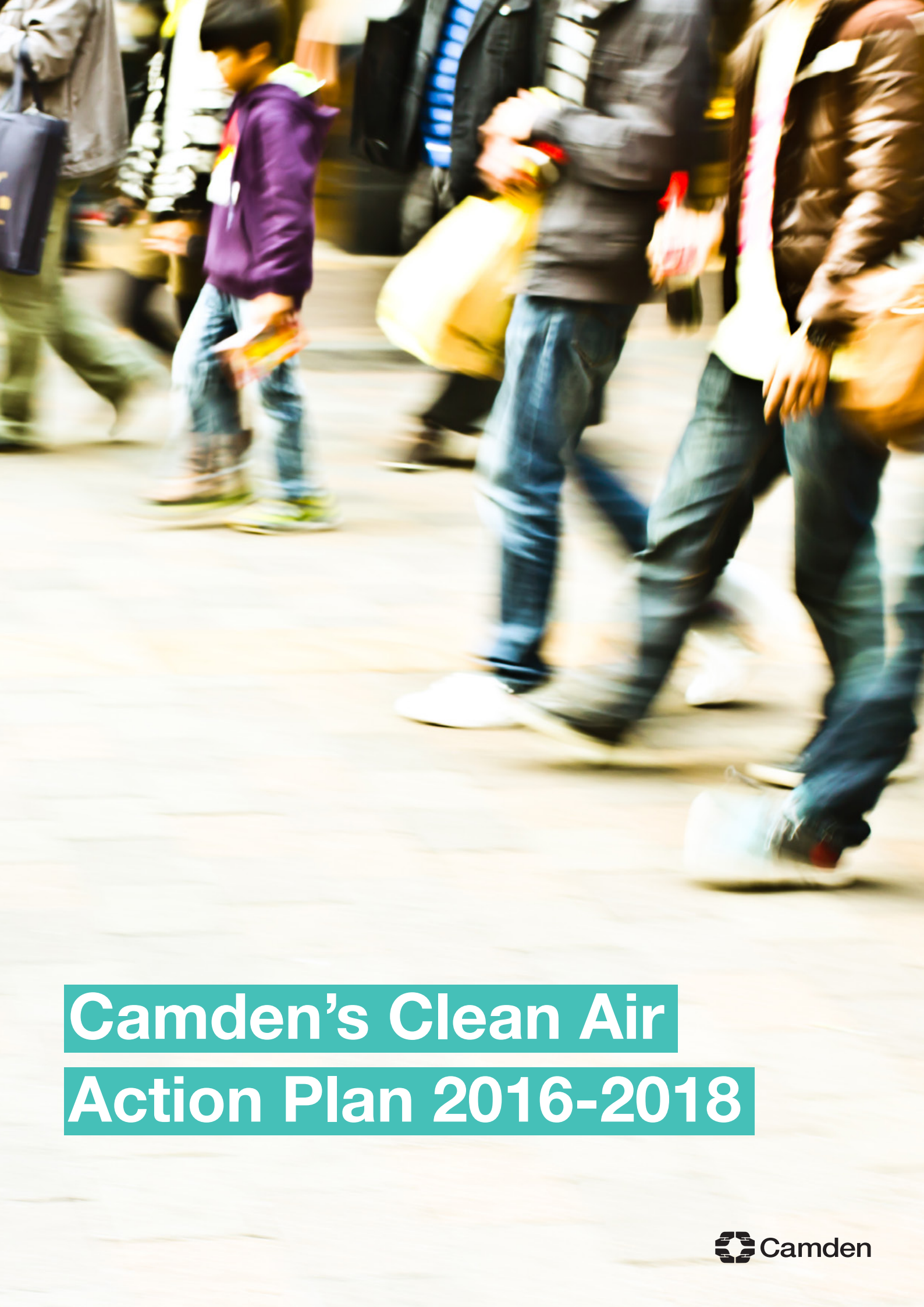




Camden's Clean Air Action Plan 2016-2018

Foreword

Improving air quality in Camden is vitally important. It has a direct impact on the health and wellbeing of our residents, workers and visitors. Air pollution does not respect borough boundaries, and joint action is needed not just at a local level, but at regional, national and European levels of government. It is however crucial that we do our bit and provide strong leadership on this important issue.

Camden, along with all of central London, continues to exceed European objectives for air pollution. This new Air Quality Action Plan outlines the steps we will take between 2016 and 2018 to improve air quality across our borough. It builds on our 2013-2015 plan, and looking back, there has been good progress on improving Camden's air quality. We improved policies across the council to reduce emissions from new developments and our own vehicles and buildings. We remain a leader in London for cycling infrastructure. We worked with our schools, businesses and hospitals on projects to improve the built environment and raise awareness of air quality issues. We led on London-wide projects such as the industry leading London Low Emission Construction Partnership and the Mayor of London's Breathe Better Together awareness raising campaign. And we fought for better and stronger local and national policies, which included lobbying central Government and the GLA in partnership with our neighbouring boroughs and many of our major public and private sector partners.

However, there is much more to be done. This new Action Plan outlines how we will continue to meet our statutory obligations for managing air quality; how we will work across the whole council and beyond to minimise emissions from transport, from existing buildings and new developments, including High Speed 2; how we will continue to raise public awareness of air quality issues, helping people to reduce both their contribution, and exposure, to air pollution; and how we will work in partnership with others to press for more action to be taken at all levels of government.

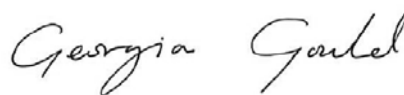
This document also sets out how we will look to work in innovative and collaborative ways with the community on air quality. We received a large number of responses to the public consultation on this plan, and we would like to thank you all for your comments, ideas and proposals.

This is a time of increased awareness and understanding of the health implications of air pollution in London. Across the capital, nearly 9,500 people die each year as a result of being exposed to London's air. Camden has a strong track record of working with public health professionals to tackle air pollution, and we can see this relationship strengthening further in future. We must work together to take advantage of the opportunities this increased profile may bring and build momentum through this new Action Plan to improve the air we all breathe.



Councillor Meric Apak

Cabinet Member for Sustainability and Environment
London Borough of Camden



Councillor Georgia Gould

Cabinet Member for Young People, Adults and Health
London Borough of Camden

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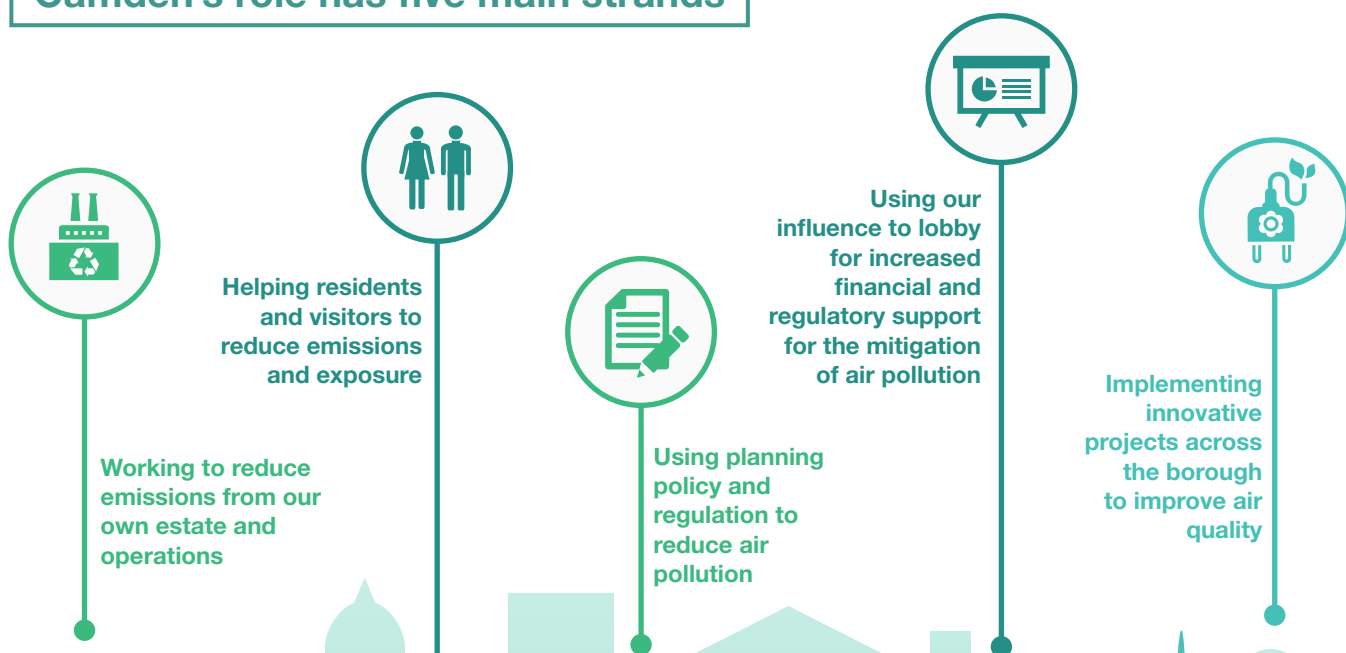
INTRODUCTION

This document presents an updated Clean Air Action Plan (CAAP) for Camden for 2016 to 2018. The plan brings together a variety of actions to help reduce the key air pollutants in Camden - Nitrogen Dioxide (NO₂) and Particulate Matters (mainly PM₁₀ and PM_{2.5}) – which arise from road traffic, gas boilers, and other sources. Since 2000, the whole of the London Borough of Camden has been designated an Air Quality Management Area (AQMA) for PM₁₀ and NO₂. Whilst we are currently meeting the national short and long term objectives for PM₁₀, Camden (and the majority of London) continues to fail to meet the national short and long term objectives for NO₂.

Improving local air quality plays a key role in safeguarding public health and the environment, as well as enhancing quality of life for all those who live, work and visit Camden. Our commitment to improving air quality is outlined in **The Camden Plan** through the council's work to create sustainable neighbourhoods. Air quality is also included in our environmental sustainability plan, **Green Action for Change (2011 – 2020)**.

Air pollution is a shared problem, with vehicles crossing borough boundaries and pollutants blowing in from elsewhere in London, the UK, and beyond, with emissions being regularly traced to central Europe or even dust from the Sahara. In addition, many sources of pollution, as well as policies and technology to reduce pollution, are managed regionally, nationally or at a European level. For example, public transportation, taxis and many major roads (such as the Euston Road Road) are managed by Transport for London (TfL), while the power to encourage a move away from diesel vehicles through policies such as changes to vehicle excise duty is in the hands of national government. It is therefore essential to work in partnership to achieve the shared aim of reducing air pollution, as well as continuously doing all we can and challenging others to do more to address this issue. This CAAP provides information on the air quality situation in the London Borough of Camden, and outlines the work that is taking place to reduce levels of air pollution in the borough.

Camden's role has five main strands



Supporting Plans and Strategies

A number of Council plans and strategies support the Clean Air Action Plan:

- The Camden Plan, the five-year vision for Camden.
- The Local Plan, which sets out our strategy for managing growth and development in the borough.
- Camden's Environmental Sustainability Plan, Green Action for Change 2012 - 2020, which specifies the Council's policies and measures with regards to reducing CO2 emissions, waste and other environmental impacts.
- Camden's Parking and Enforcement Plan, which sets out policies designed to reduce inter-borough and intra-borough car journeys and to encourage the take up of lower polluting vehicles.
- The Camden Transport Strategy 2011-2031, which outlines how the Council will deliver the borough's transport policies, programmes, and environmental objectives focused around reducing air pollution and carbon dioxide emissions, and fulfils Camden's statutory obligations related to the Mayor's Transport Strategy.
- Camden's Joint Strategic Needs Assessment emphasises the beneficial impact on public health of improving local air quality.



AIR QUALITY IN CONTEXT

European, National and Regional Air Quality Regulations

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. The objectives for ten pollutants have been prescribed within the AQS based on the Air Quality Standards (England) Regulations 2007. Camden currently meets all the objectives for air quality apart from short and long term means for NO₂.

The Mayor of London has a statutory duty to reduce the levels of the seven locally managed pollutants to achieve the Government's air quality targets. The Mayor of London's Air Quality Strategy, 'Clearing the Air', was published in December 2010 and the GLA publishes progress reports on the Actions in Cleaning the Air annually.

In 2015 the UK Supreme Court instructed national government to produce a new National Action Plan for meeting NO₂ objectives. The Action Plan for Greater London [link] suggested that compliance in London would not take place until 2025. In addition, the EU has begun formal infraction proceedings to fine the UK for its continued non-compliance with NO₂ objectives.

The Health Impacts of Air Pollution

Air pollution is associated with a number of adverse health impacts. Air pollution particularly affects the most vulnerable in society: children and older people, and those with pre-existing heart and lung conditions. A large range of studies and reports have confirmed the links between air pollution and ill health and premature death, and the complex cumulative impacts of different pollutants on health are increasingly well understood.

In 2015 a major study commissioned by the GLA and TfL, and carried out by King's College London, quantified the number of deaths in London due to long-term exposure to the two key air pollutants: NO₂ and PM_{2.5}. The study found that in 2010, an estimated **9,416** deaths in London were caused by air pollution. In Camden, **264** deaths were attributed to air pollution in 2010.

Deaths caused by air pollution also form one of the indicators of the Public Health Outcomes Framework. The latest figures suggest that in 2013, the percentage of Camden's annual adult mortality rate caused by particulate matter (PM_{2.5}) was **7.4%**. This is higher than the England (5.3%) and Greater London (6.7%) averages, and the sixth highest of all London boroughs.

There is also a significant inequalities dimension to air quality; in London there is a strong association between the highest levels of exposure to poor air quality and the prevalence of the capital's more disadvantaged and vulnerable communities. For example, a study in 2013 found that 83% of primary schools in London that were in areas of poor air quality were also considered to be 'deprived schools'. This is partly because of a general trend between proximity to busier roads (with higher pollution) and lower house prices. Improving air quality can then be seen as part of wider efforts to address health inequalities.



Characteristics of the key pollutants

Pollutant	Composition	Sources	Effects
Particulates	PM₁₀ is particulate matter smaller than 10 micrometres (µm, or 0.001mm) in diameter, PM_{2.5} is that smaller than 2.5 µm. PM₁₀ is considered the threshold below which particles can be drawn into the lungs. Smaller PM_{2.5} is considered an even greater health risk due to being able to get deeper into the lungs and bloodstream. There is currently no specific air quality objective for PM_{2.5}, but it is anticipated this fraction may be subject to regulation in future.	Particulate matter is made up from a wide range of substances. It has both man-made and naturally occurring sources. In central London, road vehicles are responsible for around 80% of PM₁₀ and PM_{2.5}.	Strongly linked to health problems, including asthma, lung cancer and cardiovascular illness. Day to day variations in particulate pollution levels are strongly associated with variations in daily deaths, hospital admissions for respiratory and cardiovascular diseases and asthma.
Oxides of nitrogen	NO_x refers to the combination of NO and NO₂ (nitrogen monoxide and nitrogen dioxide). During hot and sunny weather, NO_x and volatile organic compound (VOCs) emissions (primarily produced by vehicles and industrial processes using solvents), react in the atmosphere to form ground level ozone. Ozone is one of the main constituents of photochemical smog, with higher concentrations in summer when sunlight and temperatures are higher.	Around half of NO_x in Greater London comes from road transport. In central London, workplace gas use dominates. In outer London, domestic gas use is a major contributor in outer, more residential parts of the city.	NO₂ has been strongly linked with emphysema, bronchitis, and heart disease. Though there is some evidence that hospital admissions are related to concentrations of nitrogen dioxide, it has not yet been considered robust enough to quantify the effect. Overloading of nitrogen has also been connected with the degradation of sensitive habitats and deteriorating biodiversity.

AIR QUALITY – A SHARED PROBLEM

Partnership Working

Air pollution is a complex problem with a wide variety of sources, solutions and areas of responsibility which sit across the three tiers of UK Government (local, regional and national), as well as with the EU. The sources of air pollution mean the role of companies such as vehicle manufacturers, those with significant fleets, developers and construction firms, and major building owners, have an equally important part to play. The key air quality responsibilities of the three tiers of Government are:

- **Central Government**

The Department for Environment Food and Rural Affairs (Defra) manages air quality nationally. It is responsible for the UK Air Quality Standards and for reporting to EU on progress with meeting the European limit values. Defra also provides guidance, support and some funding for boroughs to manage air quality locally, while central Government is also responsible for large scale policy interventions that could have massive impacts on local air quality.

- **Greater London Authority (GLA) and Transport for London (TfL)**

The Mayor of London has a legal responsibility to prepare and to keep under review an Air Quality Strategy for the Greater London area. The GLA is responsible for delivering the Mayor's Air Quality Strategy, and also manage the London Local Air Quality Management framework, which guides boroughs in fulfilling their statutory duties to work to improve air quality. The GLA is increasingly working more closely with London boroughs on joint initiatives to improve air quality.

The GLA coordinates the London Atmospheric Emissions Inventory, which outlines the sources of the key pollutants across London and at the borough level. TfL is part of the GLA group. It is responsible for planning and running London's public transport services including the bus network, maintains key roads (such as the Euston Road and Finchley Road) and regulates London taxis and private hire vehicles.

- **Local Government**

Councils are responsible for Local Air Quality Management, which involves monitoring and reporting on air pollution, and delivering on an Action Plan.

Camden will continue to both challenge and work in partnership with a variety of public and private organisations to improve air quality. Partnership working forms a strand that can be found throughout many of the actions and policies set out in this Action Plan, with our formal lobbying and partnership working set out in Section 5 of the action plan.

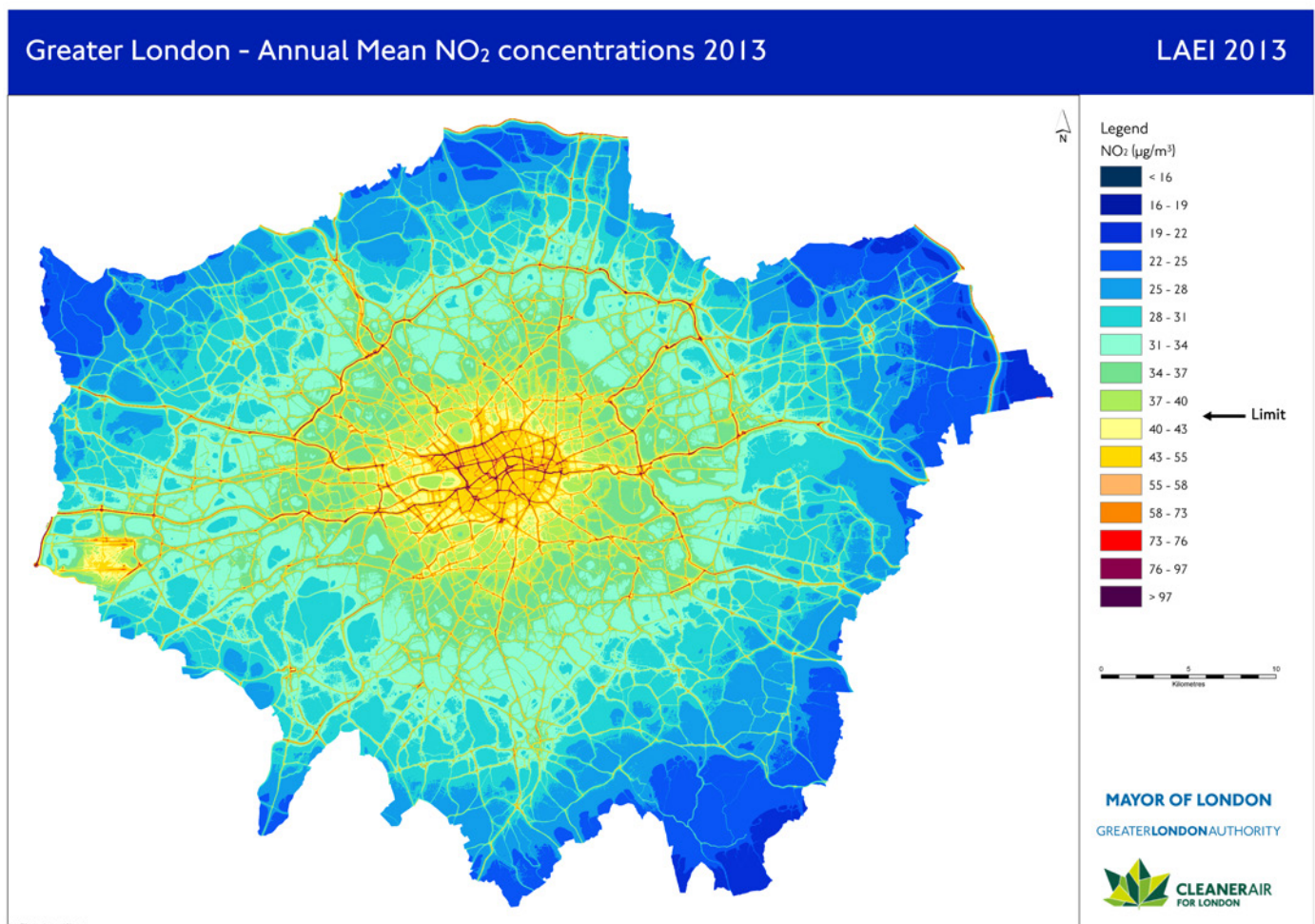


Air Quality in London

Air quality is a cause of concern across London. While all of the 33 London boroughs have declared AQMAs, air quality is poorest in the centre of London, where there is the heaviest concentration of traffic and buildings.

NO₂

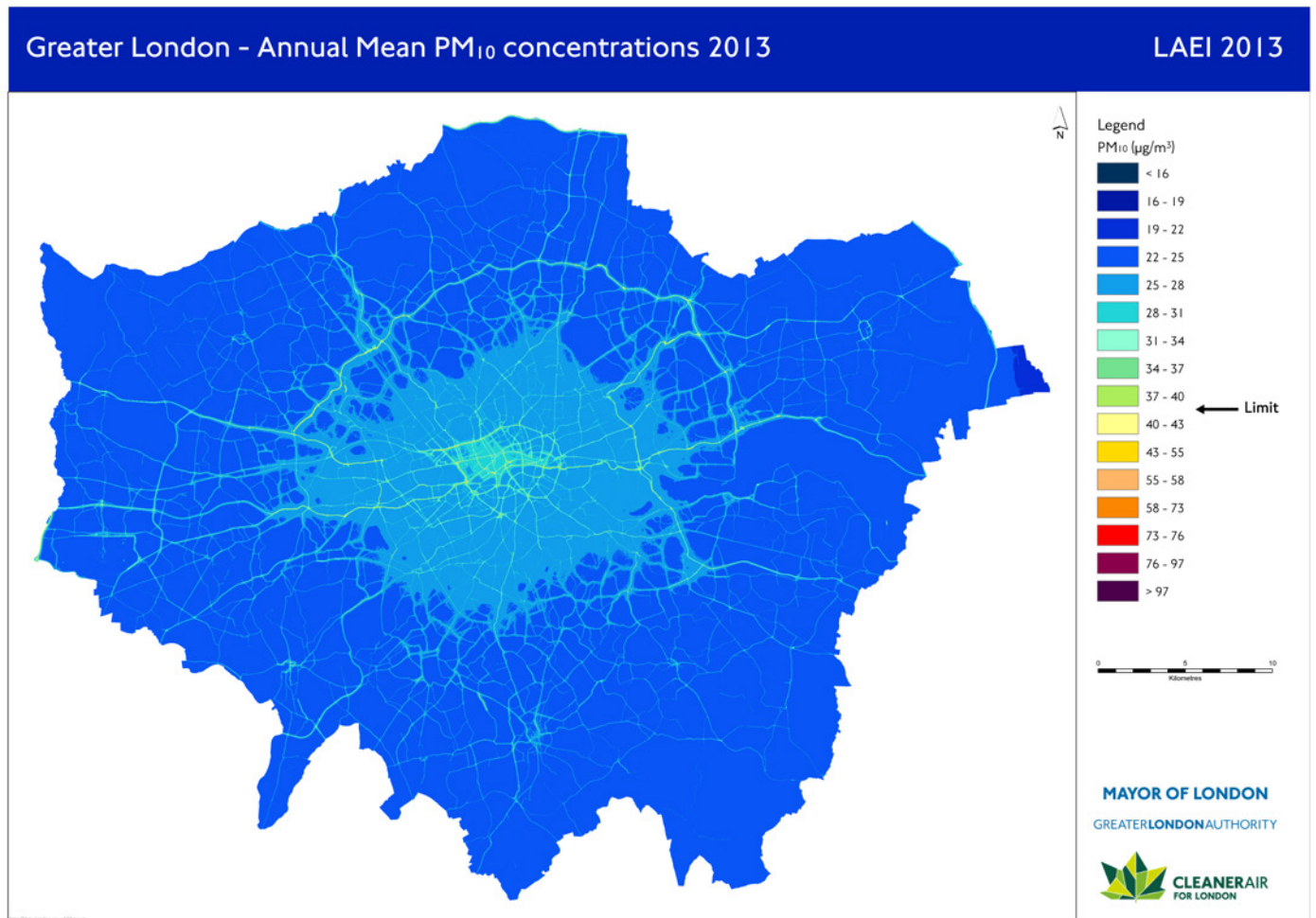
In central London, NO₂ objectives are consistently breached at both urban background and kerbside sites. In outer London, urban background sites tend to be within the limit values but these are still breached at the kerbsides of busy roads. The below map uses data from the monitoring sites across London to model where NO₂ objectives have been breached in 2010, yellow, orange, and red signifies areas that are breaching the objective. This demonstrates that this is a London-wide problem, and that the main areas of concern are central London, and along the most heavily trafficked roads.



Source: Cleaner Air For London (LAEI 2013 data)

Particulate Matter

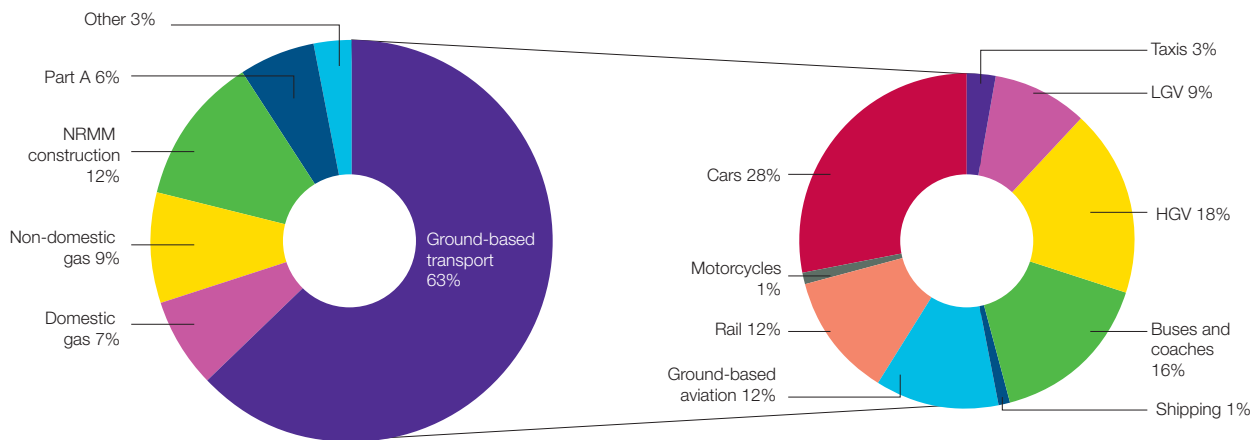
The annual PM_{10} limit value is being met across London, with the limit value for daily mean PM_{10} concentrations being met at the majority of monitoring locations, but exceeded intermittently at a small number of sites, such as by large junctions on the busiest roads. Figure 2 models the areas (primarily main roads in central London) where the daily mean target for PM_{10} is sometimes exceeded.



Source: Cleaner Air For London (LAEI 2013 data)

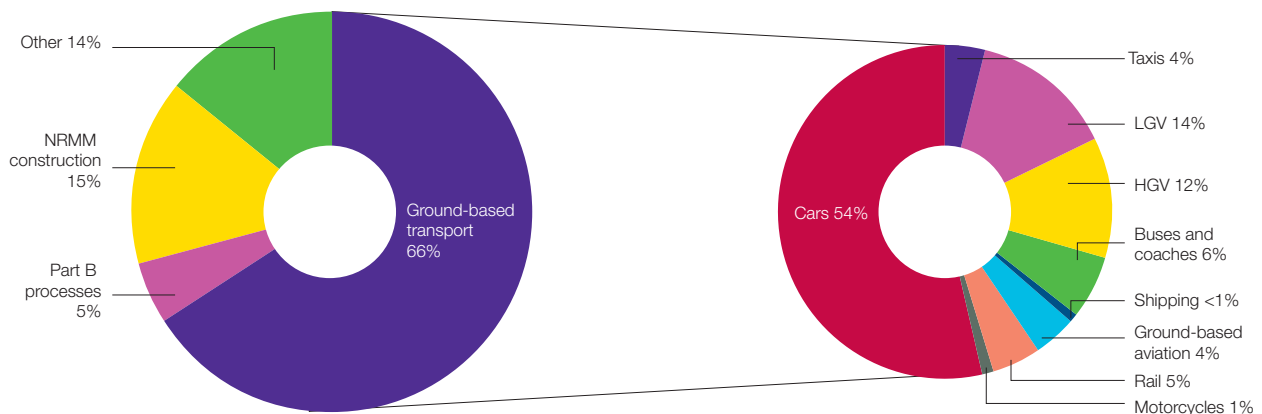
Sources of pollution in London

Sources of NO₂ in London (2010):



Source: Cleaner Air For London (LAEI 2010 data)

Sources of PM₁₀ in London (2010):



Source: Cleaner Air For London (LAEI 2010 data)

Some modes of transport emit a far higher proportion of air pollution than others, and understanding this helps inform the focus of actions in this plan. Focus areas for transport are:

- **Taxis**, which are responsible for 25% of PM₁₀, and 10% of NO₂.
- **Buses**, which have made great improvements with regards PM₁₀ and now only contribute 10% of central London totals, but contribute 40-50% of NO₂.
- **Cars**, which contribute 23% of PM₁₀ and 20% of NO₂.
- **Heavy goods vehicles and vans** which contribute about 30% of NO₂ and 20-30% of PM₁₀.

Key non road sources:

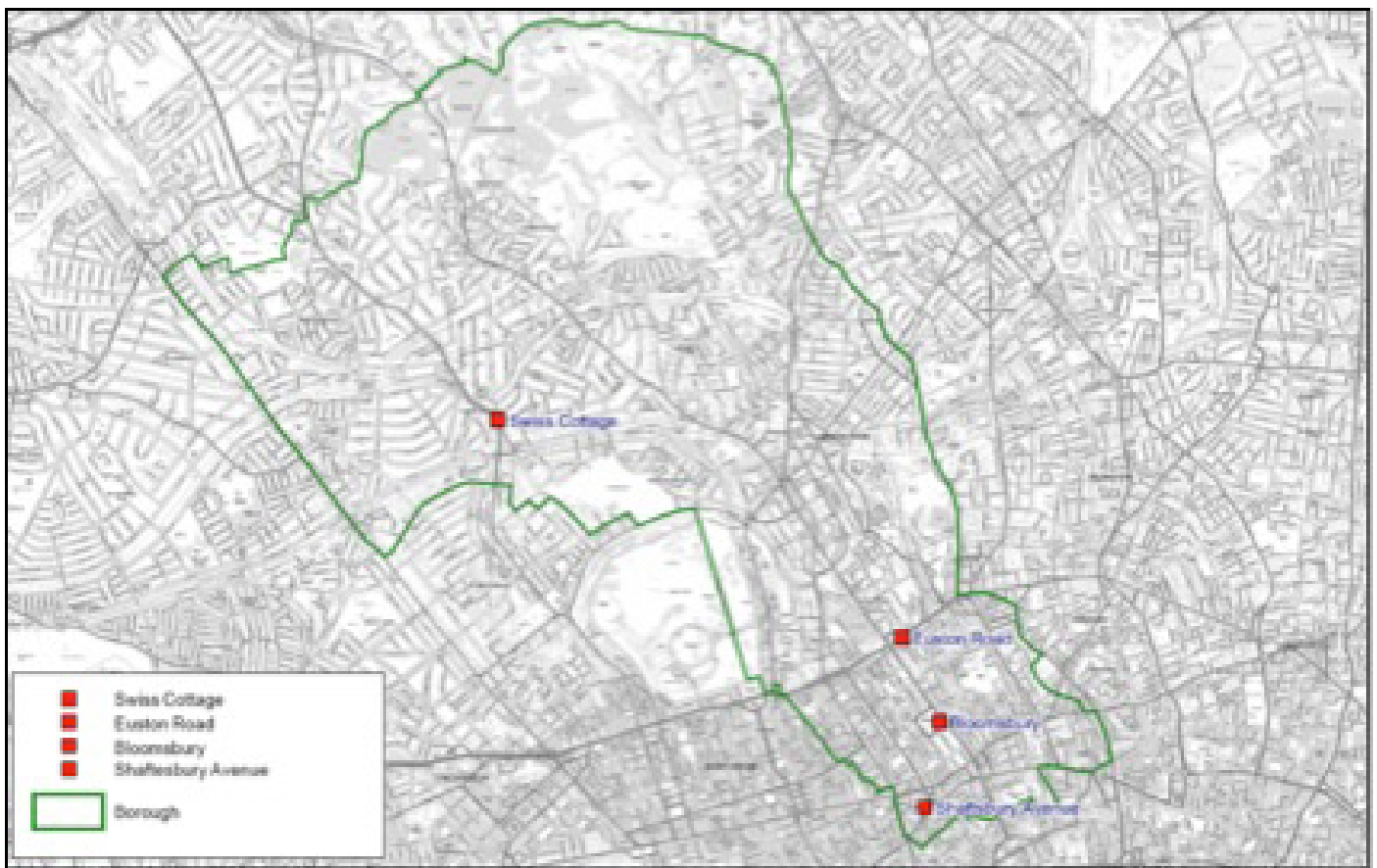
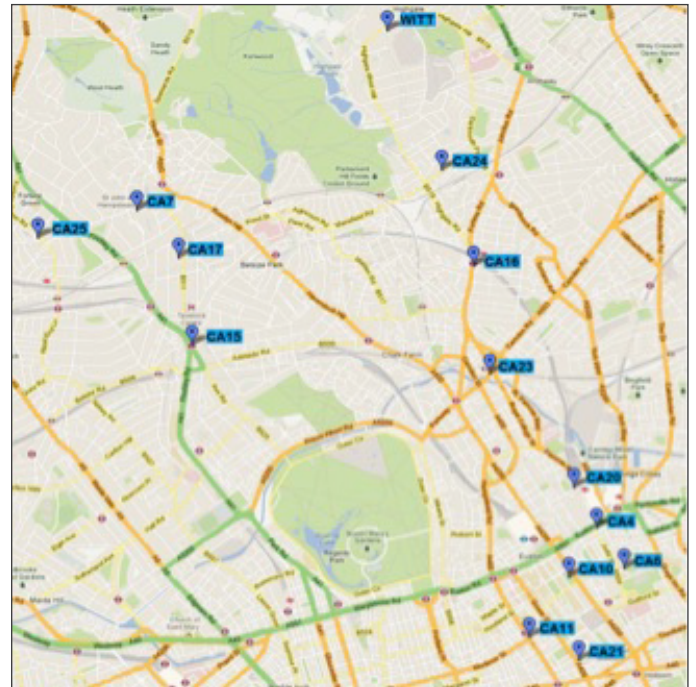
- **Domestic and commercial boilers** are a key source of NO₂ (around 40%) and a small source of PM₁₀;
- **Small industrial processes** are regulated by Local Authorities;
- **Construction** is also responsible for a small proportion of PM₁₀ in Central London and is regulated by Local Authorities.

AIR QUALITY IN CAMDEN

Pollution Monitoring in Camden

Camden has four automatic monitoring sites in the borough, as well as sixteen NO₂ diffusion tubes. As well as these long-term monitoring sites, we also monitor air pollution levels in a number of other ways:

- Short term dust monitoring takes place at construction sites to help control dust emissions from these activities
- Diffusion tube monitoring to evaluate the success of specific projects
- Real time monitoring at roadsides using portable monitors to evaluate the impact of Transport projects and interventions

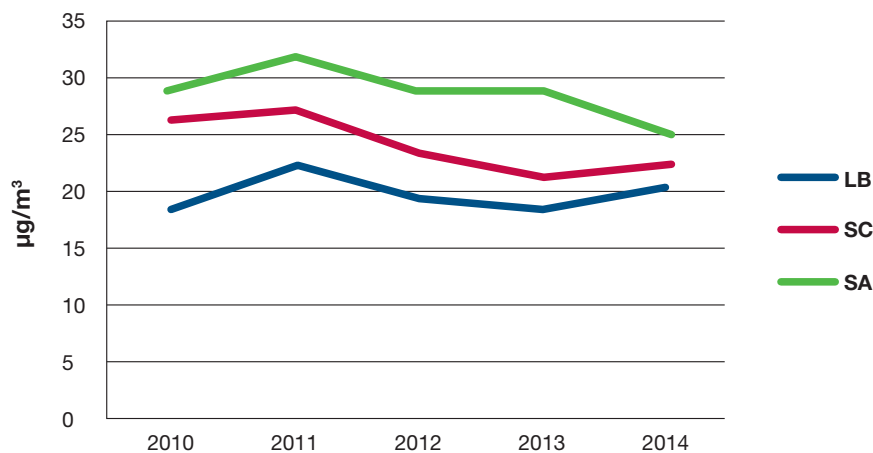


Air quality levels in Camden

Annual mean levels for NO₂ and PM₁₀ at Camden's main automatic monitoring stations are shown below, as are annual mean results for NO₂ at Camden's diffusion tube monitoring locations.

PM₁₀

Trends in Annual Mean PM₁₀ concentrations

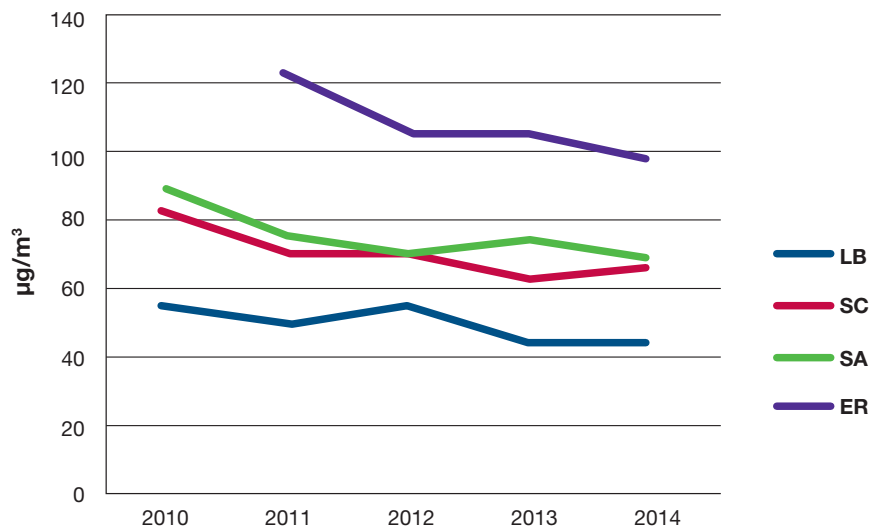


Source: Camden monitoring data

The concentrations of PM₁₀ recorded in Camden at Shaftesbury Avenue (SA), Bloomsbury (LB) and Swiss Cottage (SC) continue to meet the objective of less than 40 µg/m³. Concentrations of PM₁₀ increased marginally at each of the three sites between 2010 and 2011 before recording decreasing levels in 2012 and 2013. In 2014 levels increased at SA and SC sites while continuing to decrease at LB. 2014 saw the first year of PM₁₀ monitoring at Euston Rd, with an annual mean of 29 µg/m³ recorded.

NO₂

Trends in Annual Mean NO₂ concentrations measured at automatic monitoring sites



Source: Camden monitoring data

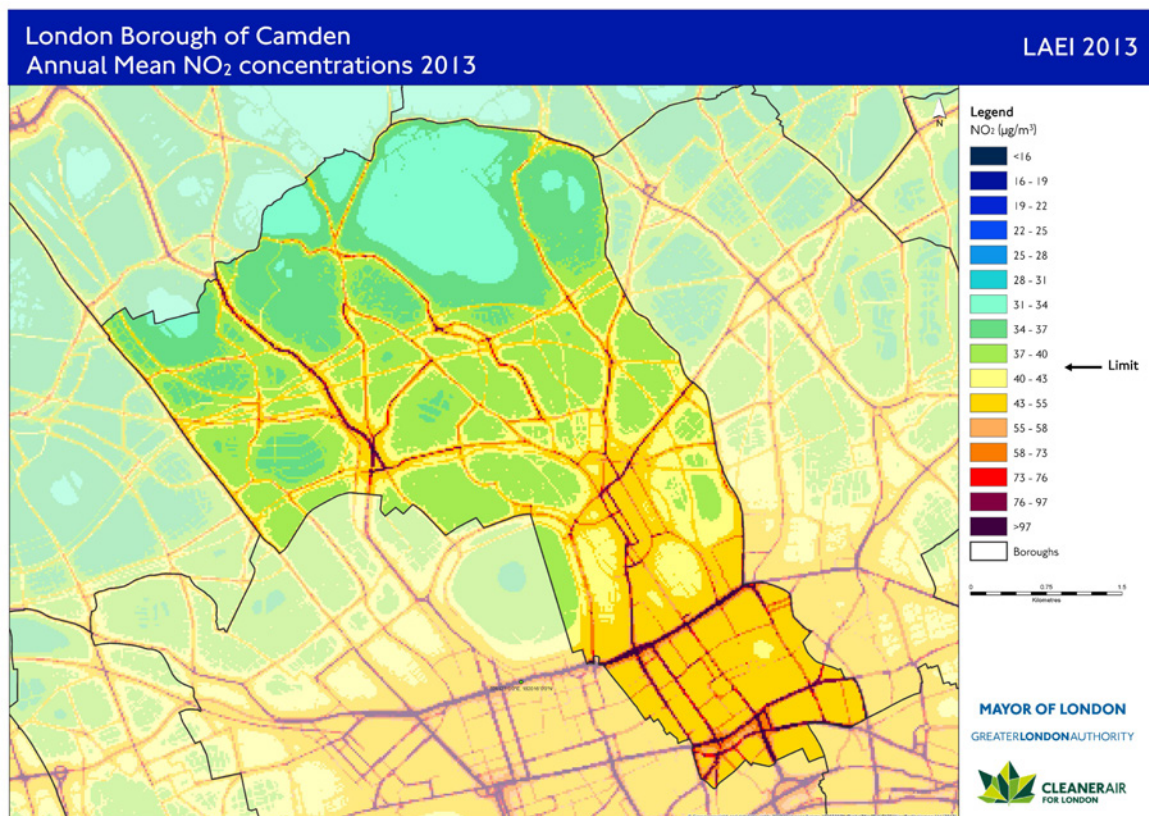
The annual mean objective for nitrogen dioxide was not achieved at any of the monitoring sites in 2014. Levels of NO₂ have remained largely static since 2001, although there has been a downward trend since 2009. This general downward trend is also reflected in NO₂ diffusion tube monitoring results:

Site ID	Location	Annual mean concentration (adjusted for bias) mg/m3				
		2010* (Bias Adjustment Factor = XX)	2011* (Bias Adjustment Factor = 0.95)	2012* (Bias Adjustment Factor = 0.95)	2013* (Bias Adjustment Factor = 1.00)	2014 (Bias Adjustment Factor = 0.97)
CA4	Euston Road	82	93.12	82.05	107.75	89.74
CA6	Wakefield Gardens	34	45.61	39.29	40.32	36.44
CA7	Frognal Way	29	31.46	28.89	31.95	28.55
CA10	Tavistock Gardens	52	47.56	40.12	49.37	46.50
CA11	Tottenham Court Road	92	91.67	83.30	88.09	86.75
CA15	Swiss Cottage	71	73.17	72.66	83.08	74.34
CA16	Kentish Town Road	74	57.19	58.97	65.32	57.83
CA17	47 Fitzjohn's Road	73	58.39	61.20	65.24	60.30
CA20	Brill Place	54	50.79	50.00	49.37	52.34
CA21	Bloomsbury Street	41	76.73	71.66	76.08	80.82
CA23	Camden Road	84	72.21	67.40	77.85	72.21
CA24	Chetwynd Road	68	44.12	43.67	47.75	44.76
CA25	Emmanuel Primary	-	41.5	45.94	57.91	48.36
WITT	Wittanhurst Lane	-	-	-	53.10	48.26

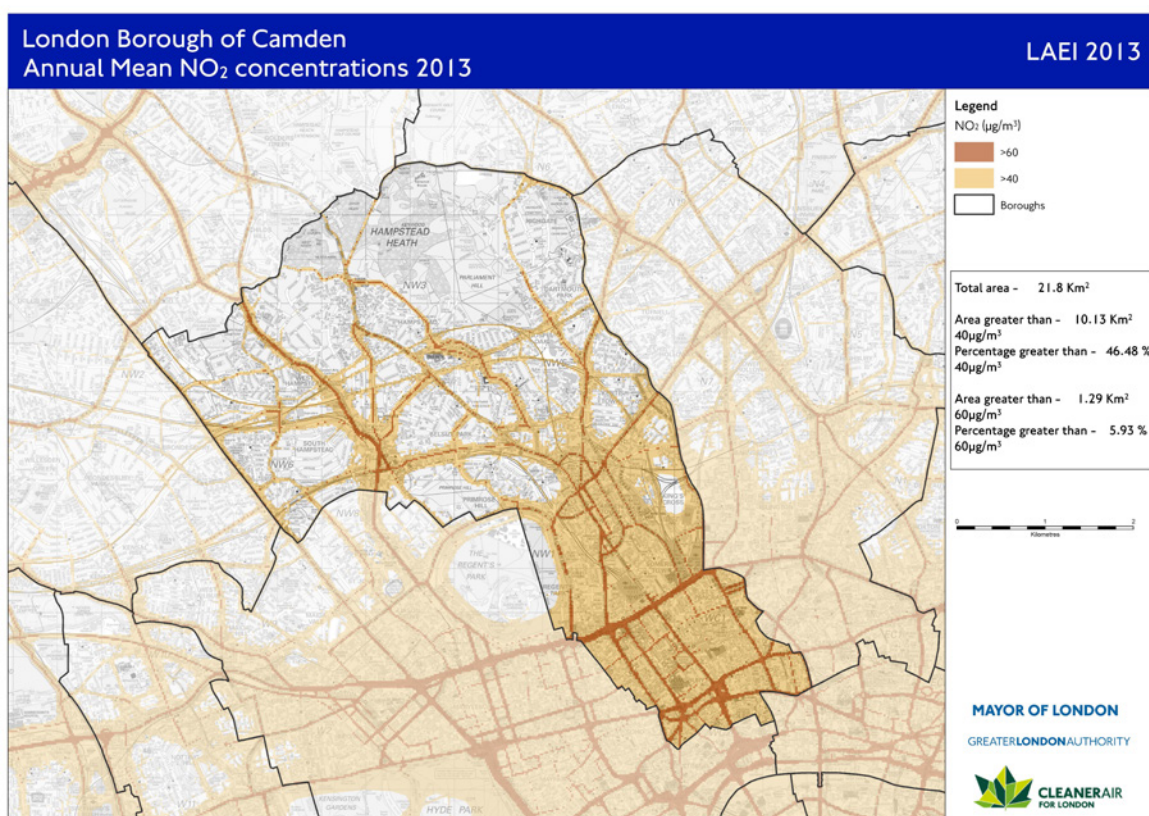
Source: Camden monitoring data

The following maps show the most recent modelled levels for NO_2 and PM_{10} levels within Camden, produced by the GLA as part of the 2016 London Atmospheric Emissions Inventory:

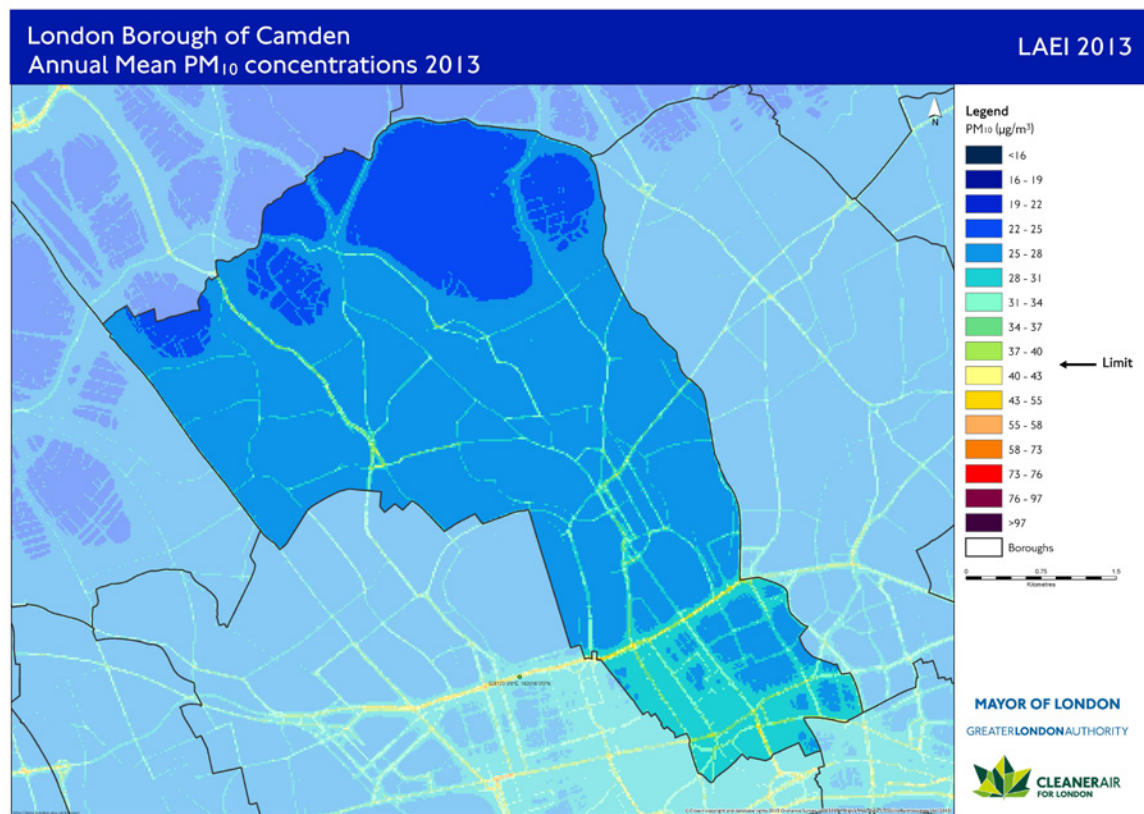
Overall NO_2 modelled levels:



NO_2 modelled exceedances:



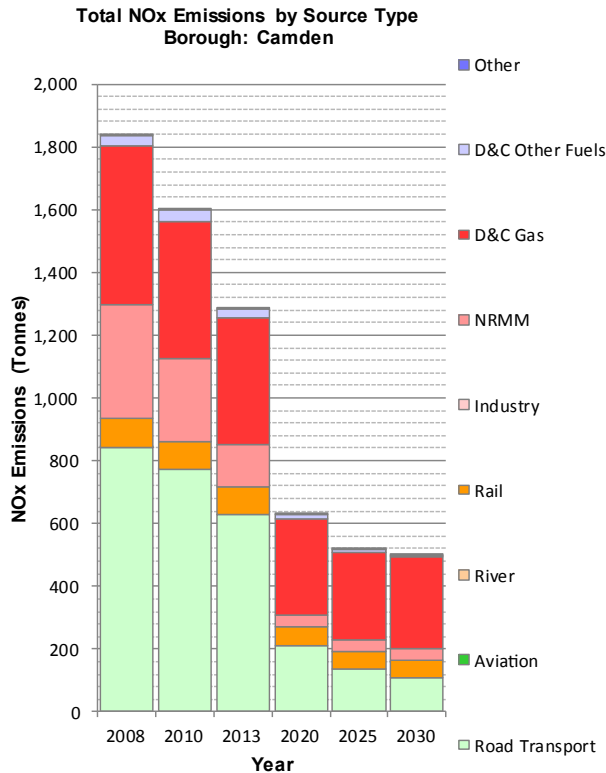
Overall PM₁₀ modelled levels:



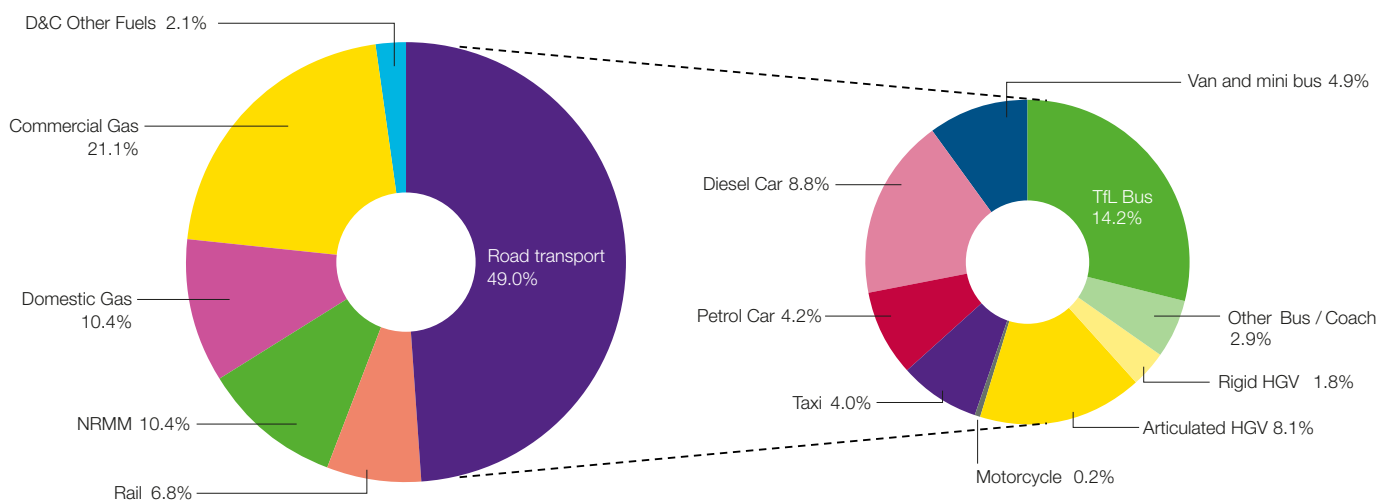
The above maps show the strong correlation between air pollution levels and major roads across Camden; for example Euston Road is clearly visible cutting across the borough in both NO₂ and PM₁₀ maps. These maps also reflect the general gradient of improving air quality from the south to the north of the borough. While quieter residential streets in the north of the borough are likely to not exceed EU Objective levels for NO₂, similar streets from roughly Camden Town southwards are much more likely to experience air quality levels exceeding Objective levels.

Sources of pollution in Camden

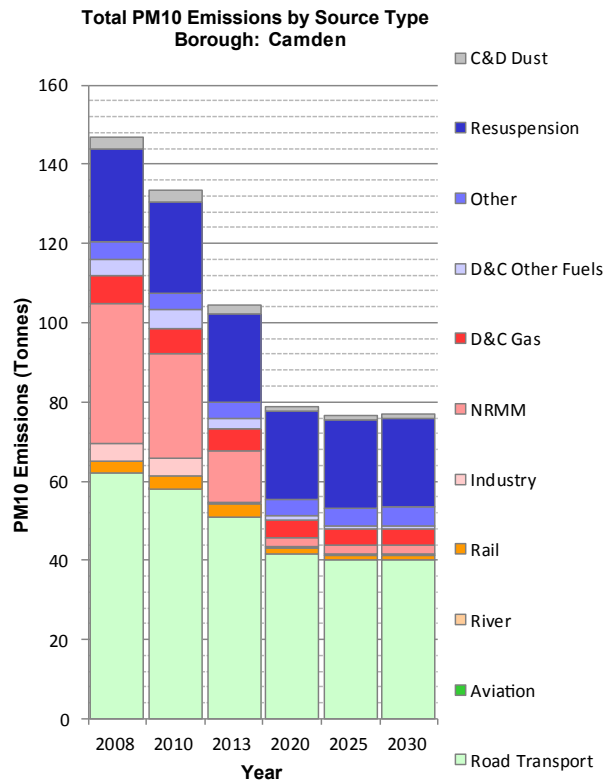
Understanding the key causes of pollution in Camden helps guide the Actions in the CAAP, as by understanding where pollution is coming from, resources can be allocating more efficiently. The sources of NO₂ and PM₁₀ below also show how important the role of partnership working is to improving air quality levels, as high proportions of emissions come from sources that the council does not have direct control over, such as those from road transport.



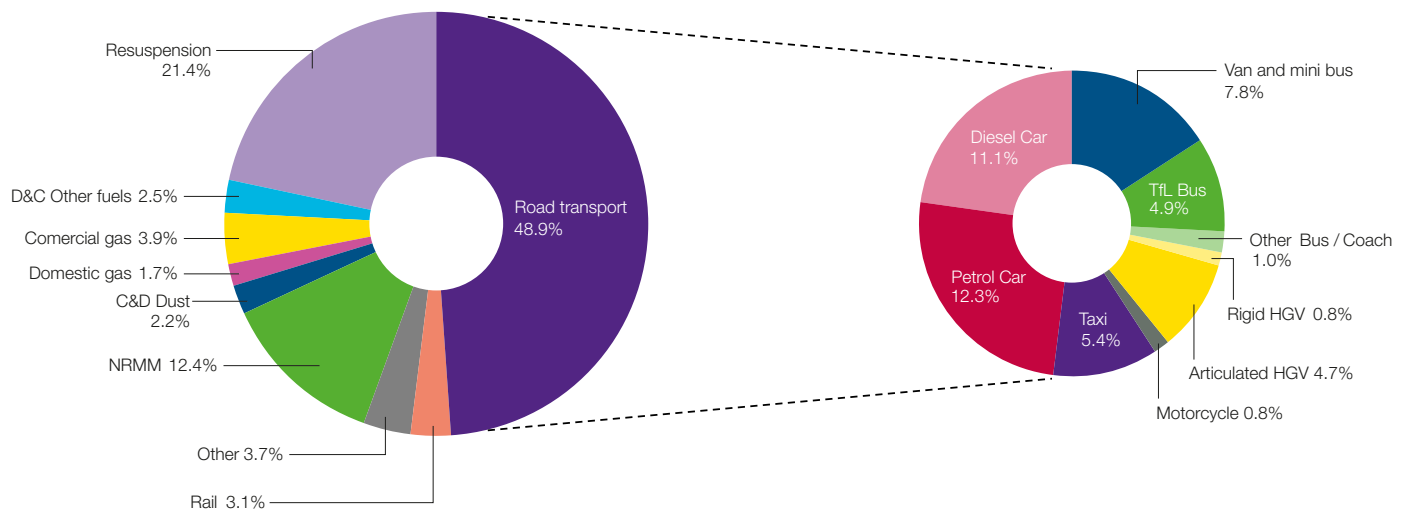
Sources of NO_x in Camden (LAEI 2016 data)



Sources of NO_x in Camden (LAEI 2016 data)



Sources of PM₁₀ in Camden (LAEI 2016 data)



Sources of PM₁₀ in Camden (LAEI 2016 data)

CLEAN AIR ACTION PLAN

This Action Plan identifies initiatives, projects and policies to be implemented by Camden and our borough partners to reduce NO₂ and particulate matter emissions from the key emission sources in the borough – road transport, gas boilers and new developments. Equally, it aims to increase awareness of air quality, and help everyone in Camden understand how they can help reduce air pollution and how they can minimise their exposure when air quality is particularly poor.

The overarching aims of the Plan are to:

1. Continue to meet the EU objectives for Carbon Monoxide, Benzene, 1,3-Butadiene, Lead and PM₁₀.
2. Continue to reduce concentrations of PM₁₀ and PM_{2.5}, and to meet the EU Objective for NO₂.

The key objectives of the Plan are to:

- Encourage reductions in fossil fuel use, the adoption of clean fuels and low emission technology and promote energy efficiency.
- Raise awareness about air quality in Camden and promote lifestyle changes which can help reduce levels of air pollution and minimise exposure to air pollution.
- Improve the health and well-being of the local population, including those that work and visit Camden.
- Work in partnership with national and regional bodies, and with local public and private organisations, to foster and drive improvements in air quality.
- Lead by example and reduce NO₂ and PM₁₀ emissions associated with the Council's own buildings and transport services.
- Ensure actions which serve to reduce NO₂ and PM₁₀ emissions complement actions to mitigate CO₂ emissions.

The Plan comprises five sections:

1. Monitoring Air Quality in Camden
2. Reducing emissions from buildings and new developments
3. Reducing emissions from transport
4. Raising awareness of air quality
5. Lobbying and partnership working

The Plan is split into two main parts. The first sets out why each of the five sections listed above are important, and highlights what has already been achieved in Camden in these areas. It also lists the key actions for each section. The second part of the Plan is the Actions Matrix, which sets out in greater detail each of the actions set for the five sections.

Progress against this Plan will be reviewed annually, and this Plan has been reviewed and approved by Camden's Cabinet Member for Sustainability and Environment and the Director of Public Health NHS Camden and Islington.



Section 1:

Monitoring Air Quality in Camden

Why the issue is important

Monitoring air quality in Camden is undertaken to comply with Camden's formal duties as an Air Quality Management Area (AQMA). By monitoring the air quality around the borough, we can assess our compliance with air quality objectives, evaluate the effectiveness of policies and projects, and also help provide information and alerts to Camden's residents, workers and visitors when pollution levels are high.

Levels are monitored to provide information on long-term trends in pollution levels, and also to provide highly detailed and complex information, often in real-time. As well as collecting data on air quality levels, sharing it is also important. By reporting on pollution levels, our efforts and the impacts of council projects can be evaluated and learnt from. Providing data in near real-time on pollution levels also provides members of the public with information to help them reduce their exposure to potentially harmful air pollution.

What is already being done

Air pollution is monitored in Camden through diffusion tubes, automatic monitoring stations, and at selected construction sites. Camden's air quality monitoring network is comparable in scope to neighbouring boroughs such as Islington and more extensive than boroughs such as Westminster who do not undertake any diffusion tube monitoring.

Portable air quality monitors have enabled the evaluation of the impact of various public realm projects in the borough, including the introduction of a borough-wide 20mph speed limit and changes made to the road network in the Bloomsbury Ward.

Real-time information and advice on air pollution levels has been disseminated through our website and Camden's leadership on major awareness raising projects such as 2014's London-wide Breathe Better Together campaign, as well as through an LED sign attached to the council's Town Hall Extension building on Euston Road, and the promotion of the text messaging pollution forecast service airText.

Actions

Action	
1	The publication on Camden's website of an accessible annual report of Camden's air quality data
2	Data from Camden's automatic monitors will be made available to the public through the London Air Quality Network website
3	Data from mobile automatic monitors will be made available to the public through Camden's open data platforms
4	To continue to monitor air quality levels on a temporary basis for road based projects and schemes
5	To review annually the monitoring requirements of Camden and update monitoring and/or reporting where necessary
6	To update Camden's air quality web pages to make them more informative and accessible, and to include details of community projects and other forms of collaborative working where appropriate

Section 2:

Reducing Emissions from Buildings and New Developments

Why the issue is important

Domestic and commercial heating is the main sources of NO₂ and a significant source of PM₁₀ emissions in Camden. Minimising emissions from gas boilers can be achieved by reducing gas consumption and improving energy efficiency in buildings. Camden has been actively promoting the benefits of energy efficiency measures for several years, primarily focusing on saving heat in homes in response to statutory requirements to improve energy efficiency and reduce fuel poverty. More recently this has also been linked to requirements to reduce the borough's CO₂ emissions in line with targets set out in the Camden Plan.

Small industrial processes also contribute a rising proportion of particulate matter emissions in Camden. The Council has a statutory duty to regulate emissions to air from industrial processes in accordance with the Environmental Permitting Regulations. This legislation requires site operators to adopt the best emission control practices in order to protect local air quality.

The construction phase of new developments can produce high intensity PM₁₀ and NO₂ emissions, with the impacts generally very geographically specific, albeit influenced by the size and location of the development. The land-use planning system plays a central role in managing the environmental impacts of new development and contributes to the protection and long-term improvement of air quality. This is achieved by ensuring that new developments do not have a negative impact on local air quality, and that public exposure to air pollutants is reduced in new developments in areas which breach the Government's air quality standards. Camden's requirements for new developments are enshrined within a number of the council's planning policies.

Camden also has an important role in reducing emissions from new developments that fall outside

of the normal planning process. High Speed 2 is a high profile example of a project where Camden will play a key role in minimising air quality impacts across a number of sites over a proposed 18 year construction period beginning in 2017.

What is already being done

- Camden commissioned and produced in 2014 of a two part guide for developers on the subject of minimising emissions from commercial gas boilers. The guidance includes advice for developers and building operators on low emission gas boilers, CHP and standby generators.
- Camden has an extensive Carbon Management Programme to reduce carbon emissions from the council's own estate and operations by 40% by 2020. Gas consumption in Camden's corporate buildings has reduced by 39.5% since 2009, while gas consumption in Camden's schools has reduced by 15% over the same period.
- A 'BREEAM Outstanding' rating was achieved for the new 5 Pancras Square building, the highest BREEAM Outstanding rating in the UK for 'mixed development building' criteria
- Support for Camden's business community in reducing its emissions through the Camden Climate Change Alliance, which has a membership of 235 organisations of all sizes and sectors across the borough.
- 1,459 home energy visits to help residents improve their energy efficiency, with 519 council properties benefitting from loft or wall insulation, and 3,140 properties benefitting from improved heating system efficiencies between 2013 and 2015.
- Awareness raising projects and materials produced to help both council tenants and private residents to improve their energy efficiency and reduce gas consumption.

- 19 schools and nurseries across the borough made improvements to their buildings and play areas to reduce emissions and help protect pupils from air pollution through Camden's Schools and Nurseries Cleaner Air Fund.
- Requirements of new developments to meet all best practice planning guidance available, including the GLA's 2014 Control of Dust and Emissions during Construction and Demolition SPG, and the GLA's 2014 Sustainable Design and Construction SPG, which requires new developments to be 'air quality neutral'.
- Camden has led on the pan-capital London Low Emission Construction Partnership, which works closely with major developers to design and implement best in class dust mitigation measures at construction sites.
- Camden has led on air quality at a route-wide level during negotiations with HS2, and has receiving a number of assurances aimed at controlling emissions during the construction and operation of the scheme, including best practice controls of dust from construction sites, and UK-leading requirements for controlling emissions from NRMM, which are stronger than the requirements set out in policy implemented by the GLA.

Actions

Action	
7	Camden will promote the adoption of fuel saving measures to residents through the Green Camden helpline, Well and Warm service, and other projects.
8	Camden will promote the adoption of fuel saving measures to businesses through the Camden Climate Change Alliance.
9	Continue to undertake energy efficiency improvement work in the Council's own buildings.
10	Ensure that all Part B Installations in the borough maintain the highest standards of air pollution emission control.
11	Work with businesses to evaluate options for reducing dependence on 'black start' emergency diesel generators.

12	Continue to work with developers and King's College London to explore best in class dust mitigation measures on Camden's construction sites
13	Ensure Camden's Smoke Control Zone is fully promoted and enforced.
14	Minimise emissions from the construction and operation of new developments by requiring developers to adhere to current and any superseding best practice guidance and supplementary planning guidance.
15	Continue to use planning conditions and obligations to require developers to adopt measures which will reduce transport emissions during operational phase of developments.
16	Require developers to undertake an air quality assessment (AQA) in circumstances where a new development could have a negative impact on air quality where the development is adjacent to sensitive receptors such as schools, nurseries, hospitals and doctors' surgeries, or where the development will introduce new receptors into an area of existing poor air quality.
17	Ensuring the enforcement of CHP and biomass air quality policies, and review the potential impacts of other types of heat and electricity generation.
18	Ensure the enforcement of Non Road Mobile Machinery (NRMM) air quality policies for new developments.
19	Review and update Camden's air quality policies and guidance to developers where appropriate, and feed into updates of Camden's wider planning policies.
20	Map air quality levels and local health prevalence data with other indicators to support planning processes.
21	Ensure that policies and assurances are in place to minimise the impact of High Speed 2 on Camden before the construction phase of the scheme begins.
22	Ensure that High Speed 2 is compliant with all agreed policies and assurances upon commencement of construction phase of the scheme.

Section 3:

Reducing emissions from transport

Why the issue is important

Road transport accounts for approximately half of the emissions of NO₂ and PM₁₀ in Camden, as well as contributing to carbon emissions and climate change. The geographically specific nature of air pollution means that transport emissions also heavily contribute to air pollution hotspots in the borough, as well as being major contributors to London-wide pollution events.

The key area in which Camden can reduce emissions from transport is through encouraging more sustainable forms of transport. Encouraging walking and cycling in the borough not only has a positive impact on air quality levels, but it also has multiple other benefits, including increasing the health of wellbeing of all those who live, work and visit Camden.

Secondly, emissions from Camden's fleet and the vehicles that service Camden's buildings are an area that the council has a more direct level of control over. By leading by example, and requiring contractors and other partners to do the same, Camden can help drive wider change beyond the primary reduction in emissions caused by council policies and projects.

It is however important to note that Camden's ability to control emissions from road transport is limited. Camden is unable to directly make changes to the TfL road network, which consists of many of the busiest and more polluting roads in the borough. Camden is also not responsible or able to control the movement of black cab taxis or buses through the borough, which again falls under the remit of TfL.

What is already being done

- Camden has experienced a significant reduction in car use and increases in walking and cycling over the last ten years. Between 2006 and 2015, Camden's screenline data shows that cycling has increased by 59% across the borough while car trips decreased by 13%.

- Cycle Training was delivered to 1,122 individuals in 2014 and in January 2015 a new adult cycle training centre was opened at Haverstock School.
- Free smarter driving courses for Camden's businesses and residents, and free trials of electric vehicles for the borough's businesses.
- Introduced a borough-wide 20mph speed limit in December 2013.
- Camden pioneered light segregation of cycling and vehicle lanes, with an innovative project in Royal College Street being extended to St Pancras in 2014. Other changes in road layouts such as on Torrington Place in 2015 will reduce traffic and improve local air quality.
- Anti-idling enforcement is carried out at selected hotspots across the borough, such as coach stands near schools.
- Opening of a new consolidation centre in Enfield, which by March 2015 had over 100 suppliers using the service involving over 300 council businesses in Camden and partner boroughs. Results include a 46% reduction in journeys to council buildings and 51% reduction in NO_x emissions.
- All hired Camden fleet vehicles now meet Euro V emissions standards, with changes to the council's Green Fleet Policy ensuring that future major procurement exercises will be framed around low emission vehicles.
- Ongoing use of bio-methane and electric vehicles in Camden's fleet, including a trial of electric post delivery vehicles in 2014.
- Our Civil Enforcement Officers ask drivers to turn off their engines wherever engine idling is observed.
- Camden achieved the 'Silver' award for its fleet through the FORs programme, which includes environmental reporting and driver training. Camden also requires major contractors to meet similar standards.

Actions

Action	
23	Continue to undertake measures to increase walking and cycling in Camden.
24	Support the uptake of low emission and alternatively fuelled vehicles in the borough.
25	Explore options to fund rapid charging electric vehicle infrastructure.
26	Encourage modal shift away from diesel vehicles through parking permit charges.
27	Engage with TfL and taxi and private hire vehicle operators to encourage and implement measures to reduce their emissions where practical.
28	Continue to enforce anti-idling policies at idling hotspots and review areas where enforcement is undertaken.
29	Explore emissions based charging for paid-for-parking bays to encourage modal shift or the use of less polluting vehicles.
30	Review housing estate Parking permits and enforcement, identify and implement improvements to increase efficiency and effectiveness in influencing car ownership and usage.
31	Increase the proportion of low emission vehicles in Camden's fleet, and reduce overall fuel usage.
32	Ensure that Camden's major vehicle procurement exercises deliver fuel savings and emissions reductions
33	Install a permanent supply of Compressed Natural Gas at Camden's York Way depot for use by the council fleet and external operators.
34	Ensure that fleet operators and contractors working with Camden minimise their emissions where possible.
35	Maintain 'Gold' FORS (Fleet Operator's Recognition Scheme) accreditation for Camden's fleet.
36	Ensure ongoing uptake of FORS bronze among Camden's contractors and suppliers via Procurement and Planning controls
37	Continue to develop the London Boroughs Consolidation Centre (LBCC) to further reduce the number of deliveries servicing council and business premises in Camden.
38	Work in partnership with schools by providing advice to encourage the adoption of travel plans and other policies to reduce transport emissions.
39	Work in partnership with businesses by providing advice to encourage the adoption of travel plans, consolidated delivery plans, and other policies to reduce transport emissions.
40	Engage with railway companies to tackle both indoor air quality issues in train stations located in Camden, and work to mitigate the impacts of emissions from diesel trains.
41	Explore potential for a Camden specific or central London wide 'car free day'.

Section 4:

Raising awareness

Why the issue is important

Informing people about local air quality can help to protect those members of the community who are most sensitive to the health impacts associated with air pollution. Increasing public understanding of the sources and effects of air pollution can also motivate lifestyle changes which can help improve air quality, for example promoting sustainable travel as method of reducing air pollution. Small changes to behaviour can also help members of the public reduce their exposure to poor air quality – for example by taking quieter routes away from busy roads personal exposure to air pollution can be halved.

The impacts of awareness raising projects on actual behaviour are difficult to quantify. However air quality is a problem that affects us all, and by educating and informing people about local air quality Camden can help residents change their behaviour and improve the health and wellbeing of the borough. While Camden has moved towards an outcomes based approach to project work, raising awareness remains a key part of work on air quality.

Partnering with Public Health is particularly important as a way to increase awareness around air pollution, especially as health professionals are a trusted voice on these kinds of issues. Camden has worked closely with colleagues in Public Health on projects relating to air quality and will continue to do so.

What is already being done

- Camden undertook a study with King's College London in 2014 that showed that pedestrians and cyclists are exposed to less air pollution than motorists. The project was the first of its kind and featured in national media.
- Camden has actively promoted airText, a free service that provides text message or email alerts to residents when high pollution levels are forecast. 345 subscribers are signed up to the Camden alerts, with many more signing up to

the general 'central London' messages. This is the 6th highest of all London boroughs.

- Camden led on the London-wide Breathe Better Together project in 2014, which highlighted the simple actions residents could take to reduce their exposure to air pollution, in particular on high pollution days. The project involved informing businesses, residents, schools, health bodies and a variety of other action groups when high pollution days were forecast. There was also a series of events to raise awareness of air quality issues at schools and public events in Camden and beyond.
- A partnership between Camden and Great Ormond Street Hospital involving patients and their families produced artwork and publicity material encouraging others to take sustainable forms of transport when visiting GOSH, and also to encourage drivers to switch their engines off around the hospital site. Engagement work was also undertaken with hospital staff and ambulance drivers to reduce engine idling and increase the number of ultra low emission taxis visiting the hospital.
- Camden worked with Islington to help educate Public Health professionals about air quality through a project called AirAware. Training seminars and workshops helped health sector workers understand the issues poor air quality can cause, and learnt what advice to give to residents who may be suffering due to air pollution.
- Air Quality is a 'key theme' in Camden's Joint Strategic Needs Assessment, meaning that taking action to reduce air pollution and increase awareness of it is a priority for Camden's Public Health bodies.
- Mapping work has taken place to better inform residents' and the council's petitioning on HS2 relating to incidences of asthma and COPD in areas affected by HS2.

Actions

Action	
42	Continue to disseminate up to date information about air quality and investigate new methods of informing the public about air pollution levels.
43	Promote the availability of air pollution forecasting services such as airText.
44	Work with public health and council resilience teams to ensure that vulnerable populations are better aware of high pollution days and short term actions they can take to reduce their exposure.
45	Continue to seek funding for air quality projects.
46	Disseminate the results and best practice from current and completed projects to further improve awareness of air quality.
47	Provide support for 'citizen science' projects being undertaken in the borough.
48	Strengthen the links between air quality and public health by briefing Director of Public Health on air quality issues and actively requiring their sign-off of statutory reporting.
49	Director of Public Health to have responsibility for ensuring their Joint Strategic Needs Assessment (JSNA) has up to date information on air quality impacts on the population
50	Increase awareness of air pollution in and encourage modal shift away from cars in schools through educational projects and lessons within the national curriculum.
51	Work with Public Health to strengthen engagement with Camden's Clinical Commissioning Group and Camden's GP surgeries.
52	Work with Business Improvement Districts and other business organisations on joint projects and interventions to increase awareness of air quality.
53	Investigate potential for green infrastructure projects to improve awareness of air quality and help absorb emissions.
54	Submit an application for a Low Emission Neighbourhood from the Mayor's Air Quality Fund, which could have a transformative impact on air quality in Somers Town.
55	Work with partners to look at innovative ways of highlighting successes of air quality work
56	Hold an air quality conference in 2016 to help raise awareness of air quality and to help forge new relationships with partners interested in air quality work.

Section 5:

Lobbying and Partnership working

Why the issue is important

Whilst the Council is in the ideal position to monitor air pollution and manage many direct interventions to reduce emissions and raise awareness, some important areas are not within the control of the council, and need to be addressed at a regional, national or European level. Examples include areas such as public transport, taxis, vehicle manufacturing, Low Emission Zones and pollution retrofit technology. There are other areas which are only partly in the council's control. For example, while this Action Plan contains policies to encourage a modal shift away from diesel vehicles, a large-scale change in consumer behaviour on diesel vehicles will likely only be driven by central government. At a more localised level, council interventions at air pollution hotspots in the borough such as along the Euston Road are limited by its status as part of the TfL controlled road network.

It is therefore crucial that Camden uses its influence to ensure that suitable policies, regulation and projects occur at regional, national and European levels.

What is already being done

- Camden has officially responded to relevant public consultations from both regional and central government in order to influence policy development. Recent examples include Defra's national air quality action plan, and the GLA's consultation on the introduction of the ULEZ.
- Camden has joined with other London boroughs in writing to the Mayor of London and central government ministers on a number of topics, for example in 2014 writing to the Mayor of London to lobby for a stronger ULEZ.

- Working with major local partners to influence decision making. In 2015 Camden wrote to the Mayor of London along with major public health institutions in Camden and some of the council's key partners along the Euston Road, including the Francis Crick Institute, Wellcome Trust, HS1 and British Land, to call on the Mayor to take more action to improve air quality along Euston Road.

Actions

Action	
57	Continue to support measures introduced by the Mayor of London and national government to improve air quality.
58	Continue to partner with other local authorities to lobby TfL and the GLA on reducing air pollution from taxis and buses.
59	Support the GLA and TfL on the introduction of the Ultra Low Emission Zone (ULEZ), but continue to press for the scheme to be improved to further reduce air pollution.
60	Lobby national government to provide further financial and strategic support for local authorities to improve air quality, and lobby for further action on national policies on diesel vehicles such as changes to road tax and a national diesel scrappage scheme.
61	Continue to partner with other major stakeholders and partners to lobby TfL and the GLA on improving air quality on Euston Road and other parts of the TfL Road Network.

ACTION PLAN MATRIX

Action	Detail	Time-frame	Outcome
Section 1: Monitoring Air Quality in Camden			
1. The publication on Camden's website of an accessible annual report of Camden's air quality data	Accessible reports produced annually to inform how Camden's air quality relates to EU limit values and WHO thresholds, with additional information on trends and changes over time.	Ongoing	- Improvements to public health through reductions in air pollution related illness - Encourages sustainable and healthy transport modes
2. Data from Camden's automatic monitors will be made available to the public through the London Air Quality Network website	All air quality data to be made freely available and downloadable through the LAQN website.	Ongoing	- Improvements in levels of awareness and understanding - Data will help measure large scale trends and forecast high air pollution episodes
3. Data from mobile automatic monitors will be made available to the public through Camden's open data platforms	Data from Camden's 5 Pancras Square monitor to be freely available in real time from Camden's open data platforms.	2016	Improvements in levels of awareness and understanding
4. To continue to monitor air quality levels on a temporary basis for road based projects and schemes	Use of portable monitors to add air quality levels to the suite of assessment tools used to evaluate the success of transport projects and interventions.	Ongoing	- Assessment of air quality impacts of various transport and/or public realm interventions - Increased awareness of Transport colleagues in understanding air quality issues and the links between their work and public health

Action	Detail	Time-frame	Outcome
5. To review annually the monitoring requirements of Camden and update monitoring and/or reporting where necessary	A review of current monitoring to be carried out annually, with a review of potential funding for additional monitoring if deemed necessary. Update this Action Plan as necessary if additional information on sources of pollution is made available (for example the London Atmospheric Emissions Inventory).	Ongoing	- Improvements in levels of awareness and understanding - To ensure Camden's monitoring network is effective and fit for purpose.
6. To update Camden's air quality web pages to make them more informative and accessible, and to include details of community projects and other forms of collaborative working where appropriate	Camden's AQ web pages to be undated to provide better and clearer information on air quality. This includes linking to relevant projects and also to external websites which host Camden's up to date monitoring information (LondonAir and Camden open data sites).	2016; ongoing	Improvements in levels of awareness and understanding

Action	Detail	Time-frame	Outcome
Section 2: Reducing Emissions from Buildings and New Developments			
Part A: Reducing emissions from buildings			
7. Camden will promote the adoption of fuel saving measures to residents through the Green Camden helpline, Well and Warm service, and other projects.	Key indicators include the number of residents receiving advice and the number of home energy visits. Use of external funding to provide private sector residents with opportunities to fund energy saving installations. Look at ways to improve the dissemination of information about energy efficiency to residents.	Ongoing	▪ Reduces emissions (air pollutants and CO₂) ▪ Reductions in number of residents in fuel poverty ▪ Fuel savings
8. Camden will promote the adoption of fuel saving measures to businesses through the Camden Climate Change Alliance.	Energy saving advice is given to all Alliance members, with the number of members being a key indicator of success. Number of businesses becoming air quality champions. Ensure that best practice guidance documents for building owners and tenants are disseminated to businesses.	Ongoing	▪ Reduces emissions (air pollutants and CO₂) ▪ Energy savings for businesses ▪ Promotion of sustainable and healthy transport modes
9. Continue to undertake energy efficiency improvement work in the Council's own buildings.	Progress with improvement programmes in council owned corporate properties and domestic units, including work to improve insulation and upgrade boilers to reduce overall fuel consumption and emissions.	Ongoing	▪ Reduces emissions (air pollutants and CO₂) ▪ Reduces number of residents in fuel poverty ▪ Fuel savings

Action	Detail	Time-frame	Outcome
10. Ensure that all Part B Installations in the borough maintain the highest standards of air pollution emission control.	Ensure that all Part B Installations meet compliance standards, and where issues are found take action accordingly.	Ongoing	Reduces emissions (air pollutants)
11. Work with businesses to evaluate options for reducing dependence on 'black start' emergency diesel generators.	Work with businesses to trial alternatives to diesel standby generators and produce guidance for use by businesses across the borough.	2017	Reduces emissions (air pollutants)
12. Continue to work with developers and King's College London to explore best in class dust mitigation measures on Camden's construction sites	Using MAQF2 funding from the GLA, continue to work with developers on sites to implement and evaluate various best in class measures to minimise dust and emissions caused by construction sites. This work will be undertaken in partnership with King's College London.	2017-2018	Reduces emissions (air pollutants)
13. Ensure Camden's Smoke Control Zone is fully promoted and enforced.	The whole of Camden is a Smoke Control Zone, which means controls are in place on the types of fuels that can be burned in commercial and domestic buildings. Ensure that relevant information is provided to existing building owners and developers to promote compliance.	Ongoing	Reduces emissions (air pollutants)

Action	Detail	Time-frame	Outcome
Part B: Reducing emissions from new developments			
14. Minimise emissions from the construction and operation of new developments by requiring developers to adhere to current and any superseding best practice guidance and supplementary planning guidance.	Current policies developers must adhere to include the GLA's 2014 'Control of Dust and Emissions during Construction and Demolition' SPG, and the GLA's 2014 'Sustainable Design and Construction' SPG, which requires new developments to be 'air quality neutral'. By following these policies Camden will ensure that developments that would result in a decrease in air quality levels (nitrogen dioxide or particulate matters) will be resisted.	Ongoing	▪ Reduces emissions (air pollutants)
15. Continue to use planning conditions and obligations to require developers to adopt measures which will reduce transport emissions during operational phase of developments.	Examples of measures includes but is not restricted to requesting travel and business plans, installing electric vehicle recharging infrastructure, and allocating car club bays.	Ongoing	▪ Reduces congestion ▪ Encouraging sustainable and healthy transport modes
16. Require developers to undertake an air quality assessment (AQA) in circumstances where a new development could have a negative impact on air quality where the development is adjacent to sensitive receptors such as schools, nurseries, hospitals and doctors' surgeries, or where the development will introduce new receptors into an area of existing poor air quality.	Update planning policies where necessary to ensure that developers designate these sites with the correct risk level, and undertake mitigation and monitoring measures accordingly in subsequent Construction and/or Demolition Management Plans.	Ongoing	▪ Reduces emissions (air pollutants) ▪ Minimise exposure of sensitive receptors near developments
17. Ensuring the enforcement of CHP and biomass air quality policies, and review the potential impacts of other types of heat and electricity generation.	Ensuring that developers select plant that meets the standards for emissions from combined heat and power and biomass plants set out in the GLA's 2014 'Sustainable Design and Construction' SPG and use ultra-low NO _x boilers in new developments.	Ongoing	▪ Reduces emissions (air pollutants) ▪ Prevent onsite energy generation from becoming a major new source of emissions in Camden

Action	Detail	Time-frame	Outcome
18. Ensuring the enforcement of Non Road Mobile Machinery (NRMM) air quality policies for new developments.	Ensure that developers are compliant with new NRMM policy introduced in 2015. Utilise guidance and training provided by the GLA to support enforcement officers.	Ongoing	▪ Reduces emissions (air pollutants) ▪ Minimise exposure of residents near developments ▪ Avoid unnecessary emissions from construction sites.
19. Review and update Camden's air quality policies and guidance to developers where appropriate, and feed into updates of Camden's wider planning policies.	Conduct an assessment of policies and guidance to developers, including the CMP pro forma and air quality checklist, to ensure these documents represent best practice. Feed into future updates of Camden's wider planning policies and procedures, including the Camden Planning Guidance, Guide for Contractors Working in Camden, and Camden Environmental Minimum Requirements. Ensure that major developments undertake Health Impact Assessments at the application stage.	2016	▪ Reduce air pollution emissions and exposure
20. Map air quality levels and local health prevalence data with other indicators to support planning processes.	Mapping air quality levels with existing and proposed energy generations (including CHP units) and decentralised energy networks, existing green infrastructure, electric vehicle charging infrastructure, and other indicators to better inform the planning process. Include local prevalence data on health issues affecting residents at postcode level.	2017	▪ Helps to improve policy and context for reducing emissions ▪ Reduces emissions (air pollutants)

Action	Detail	Time-frame	Outcome
21. Ensure that policies and assurances are in place to minimise the impact of High Speed 2 on Camden before the construction phase of the scheme begins.	Work in partnership with HS2 and with other stakeholders (including other authorities, GLA, TfL, and various residents groups) to ensure that potential impacts of HS2 are minimised. This will build on assurances from HS2 on a number of air quality issues, including air quality monitoring, compliance reporting, use of low emission vehicles, bespoke NRMM regulations, and plans to minimise air quality impacts during the operational phase of HS2.	2016-2017	▪ Reduces emissions (air pollutants) ▪ Minimise exposure of residents near developments ▪ Avoid unnecessary emissions from construction sites.
22. Ensure that High Speed 2 is compliant with all agreed policies and assurances upon commencement of construction phase of the scheme.	Ensure that monitoring and reporting regimes agreed with HS2 are correctly adhered to, and that any air quality problems caused by HS2 are minimised and mitigated as far as possible.	2017 onwards	▪ Reduces emissions (air pollutants) ▪ Minimise exposure of residents near developments ▪ Avoid unnecessary emissions from construction sites.

Action	Detail	Time-frame	Outcome
Section 3: Reducing emissions from transport			
23. Continue to undertake measures to increase walking and cycling in Camden.	The Camden Transport Strategy maintains our commitment to sustainable transport and includes key objectives to: ▪ reduce motor traffic levels and vehicle emissions to improve air quality, mitigate climate change and contribute to making Camden a 'low carbon and low waste borough' . ▪ encourage healthy and sustainable travel choices by prioritising walking, cycling and public transport in Camden. Camden will ensure these key objectives continue to be met. Work to leverage funding with LB Islington to implement a project aimed at encouraging increased cycling among residents through a cycle loan scheme.	Ongoing	▪ Encourages sustainable and healthy modes of transport ▪ Reduces traffic congestion ▪ Reduces emissions (air pollutants and CO₂)
24. Support the uptake of low emission and alternatively fuelled vehicles in the borough.	This Action covers a variety of activity, including working with the network provider to improve the coverage and reliability of Camden's existing electric vehicle charging network, providing information and guidance to residents on vehicle options, and monitoring the uptake and usage of low emission vehicles in Camden.	Ongoing	▪ Reduces emissions (air pollutants and CO₂) ▪ Encourages modal shift away from highest polluting types of vehicles

Action	Detail	Time-frame	Outcome
25. Explore options to fund rapid charging electric vehicle infrastructure.	Work with public sector (for example the DfT Office for Low Emission Vehicles) and private sector (for example private hire vehicle fleet operators, private energy suppliers) to fund and install rapid charging electric vehicle infrastructure.	2016	- Reduces emissions (air pollutants and CO₂) - Encourages modal shift away from highest polluting types of vehicles
26. Encourage modal shift away from diesel vehicles through parking permit charges.	Increase the additional charges currently appended to business and resident parking permits if the vehicle being registered is a diesel. The annual adjustment of parking fees and charges to be based on the annual adjustment of the TfL Zone1 & 2 travelcard, and is subject to periodic review.	2016	- Reduces emissions (air pollutants) - Encourages modal shift away from highest polluting types of vehicles
27. Engage with TfL and taxi and private hire vehicle operators to encourage and implement measures to reduce their emissions where practical.	This includes liaising with major business users of taxis (including major train station operators), and also providing support for the introduction of new zero emission capable taxis in London from 2017. Continued engagement with TfL to encourage TfL to undertake anti-idling enforcement of taxis.	2016-2017	Reduces emissions (air pollutants)
28. Continue to enforce anti-idling policies at idling hotspots and review areas where enforcement is undertaken.	Review current arrangements of both enforcement officers and signage to minimise idling at designated hotspots. This includes exploring the use of Fixed Penalty Notices. Liaise with businesses and developers to reduce where possible idling, and directly contact businesses who regularly have drivers idling. Work with other boroughs on 'Cleaner Air Action Days' throughout the year, where concerted efforts are made to reduce idling through volunteers and publicity materials.	Ongoing	- Reduces emissions (air pollutants) - Increased levels of awareness and understanding

Action	Detail	Time-frame	Outcome
29. Explore emissions based charging for paid-for-parking bays to encourage modal shift or the use of less polluting vehicles.	This would involve introducing a variable charging scheme with the drivers of the highest polluting vehicles paying more to park.	2016-2017	▪ Reduces emissions (air pollutants and CO2) ▪ Encourages modal shift away from highest polluting types of vehicles
30. Review housing estate Parking permits and enforcement, identify and implement improvements to increase efficiency and effectiveness in influencing car ownership and usage.	Complete a full audit of housing estate parking, develop options for change, in consultation with stakeholders and residents, and implement any agreed proposals.	2016-2017	▪ Encourages sustainable and healthy modes of transport ▪ Reduces emissions through reduced car trips (air pollutants and CO2) ▪ Reduced congestion ▪ Longer term potential to identify additional space on housing estates for other uses such as cycle parking, recreation and other uses.

Action	Detail	Time-frame	Outcome
31. Increase the proportion of low emission vehicles in Camden's fleet, and reduce overall fuel usage.	In addition to Action 26, work to improve the proportion of low emission vehicles in Camden's fleet by adhering to the council's fleet fuel hierarchy for procurement of vehicles, and ensuring hired vehicles are to the lowest emission standards (Camden already has stopped procuring any diesel vehicles). Additional measures to reduce overall fuel usage of Camden's fleet to include: ▪ Work on telemetrics and other 'smart' solutions to reduce vehicle miles. ▪ Driver training on fuel efficiency ▪ Implementing vehicle retrofits to reduce emissions from existing fleet.	Ongoing	▪ Reduces emissions (air pollutants and CO₂) ▪ Fuel savings for LBC
32. Ensure that Camden's major vehicle procurement exercises deliver fuel savings and emissions reductions	Camden Repairs are due to replace 145 vehicles in a major procurement exercise in 2017. In addition, a further 40 vehicles used by Camden's Special Educational Needs and Adult Social Care teams are due to be replaced. Camden will ensure that these procurement exercises, in line with the council's green fleet policy, will result in the introduction of alternatively fuelled vehicles that will significantly reduce emissions from Camden's fleet.	2017	▪ Reduces emissions (air pollutants and CO₂) ▪ Fuel savings for LBC ▪ Encouraging new vehicle technologies onto the market
33. Install a permanent supply of Compressed Natural Gas at Camden's York Way depot for use by the council fleet and external operators.	Replace the trailer based supply of CNG with a permanent station which will reduce outages and reduce the cost of supply. The station will continue to be open to use by other CNG users (commercial and private), in order to continue to promote alternatively fuelled low emission vehicles.	2016	▪ Reduces emissions (air pollutants and CO₂) ▪ Fuel savings for LBC ▪ Encouraging new vehicle technologies onto the market

Action	Detail	Time-frame	Outcome
34. Ensure that fleet operators and contractors working with Camden minimise their emissions where possible.	Ensure that Camden's Contractor Green Vehicle Fleet Standard is implemented where necessary in all council contracts and tenders. Work with contractors where appropriate to help them fulfil obligations and work towards lower emission fleets for use in Camden contracts and beyond.	Ongoing	▪ Reduces emissions (air pollutants and CO₂) ▪ Encouraging new vehicle technologies onto the market
35. Maintain 'Gold' Fleet Operator' accreditation for Camden's fleet.	Ensure that Camden maintains the highest level of accreditation. A requirement of FORS accreditation is that fleet operators manage, measure and report fuel consumption and at silver/ gold levels, work to actively reduce emissions. As well as environmental performance, FORS also focuses on safety and efficiency of fleet operations.	2016	▪ Reduces emissions (air pollutants and CO₂) ▪ Fuel savings for LBC ▪ Improve road safety for cyclists and other road users
36. Ensure ongoing uptake of FORS bronze among Camden' via Procurement and Planning controls	Work related road risk (WRRR) procurement terms require contractors operating vehicles to achieve FORS bronze (along with other safety equipment). It is a planning requirement that fleet operators working on construction sites are required to adhere to the 'CLOCS standard for managing work related road risk'. FORS bronze is the minimum requirement of CLOCS, but the wider standard is aligned to FORS silver.	Ongoing	▪ Reduces emissions (air pollutants and CO₂) ▪ Fuel savings for contractors and operators working in the borough ▪ Improve road safety for cyclists and other road users ▪ Vehicle routing to avoid areas of high concentrations of vulnerable road users e.g. schools

Action	Detail	Time-frame	Outcome
37. Continue to develop the London Boroughs Consolidation Centre (LBCC) to further reduce the number of deliveries servicing council and business premises in Camden.	Build on the success of the LBCC project to increase its impact on local air quality. This includes increasing the number of suppliers who use the LBCC to service Camden's buildings, while also bringing on board new businesses and premises to the scheme, potentially including the Camden Clinical Commissioning Group (CCG). This action includes undertaking a deliveries trial as part of the West End Project. Utilising the Mayor's Air Quality Fund 2, employ a new Business Development Manager to work on increasing the number of external partners who use the LBCC. Provide leadership and share best practice by continuing to promote freight consolidation at meetings and events to other local authorities and businesses.	Ongoing	▪ Reduces emissions (air pollutants and CO₂) ▪ Fuel savings for LBC ▪ Reduce congestion
38. Work in partnership with schools by providing advice to encourage the adoption of travel plans and other policies to reduce transport emissions.	Work with schools, both through the planning process for new developments and through ongoing partnerships, to encourage the uptake of policies to reduce transport emissions and improve the health and wellbeing of staff and pupils. This will include encouraging schools to join the TfL STARS accredited travel planning programme by providing information on the benefits to schools and supporting its implementation.	Ongoing	▪ Encourages sustainable and healthy modes of transport ▪ Reduces traffic congestion ▪ Reduces emissions (air pollutants and CO₂)

Action	Detail	Time-frame	Outcome
39. Work in partnership with businesses by providing advice to encourage the adoption of travel plans, consolidated delivery plans, and other policies to reduce transport emissions.	Continue to provide leadership and share best practice by promoting benefits of freight consolidation to businesses. Work with the Cross River Partnership to continue delivering travel advice and interventions to businesses working with Camden's Business Improvement Districts through the Cleaner Air Better Business Project.	2016	- Encourages sustainable and healthy modes of transport - Reduces traffic congestion - Reduces emissions (air pollutants and CO2)
40. Engage with railway companies to tackle both indoor air quality issues in train stations located in Camden, and work to mitigate the impacts of emissions from diesel trains.	Work with major station and train operators to look at ways to improve indoor air quality at Camden's main stations. Engage with train operators to work towards lower emission train engines, and to explore options for mitigating unavoidable emissions from diesel trains.	2017	Reduces emissions (air pollutants and CO2)
41. Explore potential for a Camden specific or central London wide 'car free day'.	Work with other central London boroughs to investigate the possibility of a central London wide car free day, building on the successes of previous car free day projects.	2017	- Improvements in levels of awareness and understanding - Encourages sustainable and healthy modes of transport - Reduces traffic congestion

Action	Detail	Time-frame	Outcome
Section 4: Raising awareness of the causes of air pollution and what can be done to reduce exposure			
42. Continue to disseminate up to date information about air quality and investigate new methods of informing the public about air pollution levels.	In line with the Actions in Section 1, work to ensure that Camden residents, schools and businesses are kept up to date with information on air quality and current air pollution levels. Investigate the potential for new methods of disseminating air quality information, either through better utilising existing communication channels or through new means of contacting the public.	Ongoing	Improvements in levels of awareness and understanding
43. Promote the availability of air pollution forecasting services such as airText.	Encourage sign ups to the airText service through Camden's website and social media channels. Also ensure that promotion of airText is included where appropriate in messaging of other air quality awareness raising projects.	Ongoing	Improvements in levels of awareness and understanding
44. Work with public health and council resilience teams to ensure that vulnerable populations are better aware of high pollution days and short term actions they can take to reduce their exposure.	Specific targeting of services such as airText to vulnerable residents. Working with CCG and doctors' surgeries to further improve dissemination of information about high pollution days.	Ongoing	- Improvements in levels of awareness and understanding - Reduce exposure of most vulnerable populations
45. Continue to seek funding for air quality projects.	Continue to work with partners and funding bodies to identify and apply for funding to implement air quality projects.	Ongoing	- Improvements in levels of awareness and understanding - Helps to improve policy and context for reducing emissions

Action	Detail	Time-frame	Outcome
46. Disseminate the results and best practice from current and completed projects to further improve awareness of air quality.	Ensure that final project reports, case studies, toolkits, and any other final project outputs are disseminated to interested parties in Camden and beyond. This Action also includes learning from other final outputs from relevant projects undertaken by other local authorities and organisations.	Ongoing	Improvements in levels of awareness and understanding
47. Provide support for 'citizen science' projects being undertaken in the borough.	Provide support and guidance where appropriate to 'citizen science' projects planned by businesses or resident groups. This could include air quality monitoring in local areas to inform the Neighbourhood Planning, or supporting businesses wishing to engage in personal exposure experiments.	Ongoing	- Improvements in levels of awareness and understanding - Helps to improve policy and context for reducing emissions
48. Increase awareness of air pollution in and encourage modal shift away from cars in schools through educational projects and lessons within the national curriculum.	Work in partnership with an educational provider and other London boroughs to implement a project in Camden's primary schools to increase pupil, teacher and parent awareness of air quality, what actions can be taken on high pollution days to reduce exposure, and to encourage modal shift away from getting to and from schools by car.	2017-2018	- Improvements in levels of awareness and understanding - Reducing vulnerable populations' exposure to air pollution
49. Strengthen the links between air quality and public health by briefing Director of Public Health on air quality issues and actively requiring their sign-off of statutory reporting.	Help encourage greater visibility of air quality within local authority public health teams, and ensure that public health teams support and advocate the air quality work programme. The sign off of statutory reporting will help strengthen the links between air quality and public health through DPHs taking formal responsibility for delivery of air quality improvements.	Ongoing (annually)	- Improvements in levels of awareness and understanding - Helps to improve policy and context for reducing emissions

Action	Detail	Time-frame	Outcome
50. Director of Public Health to have responsibility for ensuring their Joint Strategic Needs Assessment (JSNA) has up to date information on air quality impacts on the population.	Camden already has air quality as a key theme of its JSNA. Ensuring up to date evidence based information in JSNAs strengthens the links and joint working between air quality and public health.	Ongoing (annually)	- Improvements in levels of awareness and understanding - Helps to improve policy and context for reducing emissions - Up to date evidence base for new policies
51. Work with Public Health to strengthen engagement with Camden's Clinical Commissioning Group and Camden's GP surgeries.	To build on the successes of Camden AirAware project, which delivered training sessions to public health staff on air quality, by working with public health to establish a closer relationship with Camden's GP surgeries. This Action intends for a project to be implemented that will involve close working with Camden's CCG and GPs to increase awareness of air quality among health professionals and patients visiting GP surgeries.	2016-17	Improvements in levels of awareness and understanding
52. Work with Business Improvement Districts and other business organisations on joint projects and interventions to increase awareness of air quality.	To continue to provide support to Camden's Climate Change Alliance members and the BIDs in the borough to improve air quality awareness. Work with existing Air Quality Business Champions to help them further increase awareness and reduce emissions, and look to work with new businesses.	Ongoing	- Improvements in levels of awareness and understanding - Reduces emissions (air pollutants)
53. Investigate potential for green infrastructure projects to improve awareness of air quality and help absorb emissions.	Build on existing green infrastructure audits and greening strategies to quantify the air quality benefits of interventions and ensure that any projects are widely publicised to raise general awareness of air quality.	Ongoing	- Improvements in levels of awareness and understanding - Reduces emissions (air pollutants)

Action	Detail	Time-frame	Outcome
54. Submit an application for a Low Emission Neighbourhood from the Mayor's Air Quality Fund, that could have a transformative impact on air quality in Somers Town.	Camden has submitted a full application for a LEN from the Mayor's Air Quality Fund that sets out a vision for a LEN in Somers Town. Should the application be successful, this Action includes implementing a LEN from the projected project start date in April 2017. To use the feasibility study undertaken as part of the LEN application as a guide to implementing innovative air quality projects throughout the borough, ensuring that irrespective of the success of Camden's LEN bid, the benefits outlined in the application are maximised as far as possible.	2016	- Improvements in levels of awareness and understanding - Reduces emissions (air pollutants)
55. Work with partners to look at innovative ways of highlighting successes of air quality work	Explore options for better ways of highlighting work on air quality, which will also raise public awareness of the issue. This may include drop-in events for residents, videos or other audiovisual projects, and ties in the actions in Section 1 relating to sharing monitoring information and updating Camden's AQ web pages.	2017	Improvements in levels of awareness and understanding
56. Hold an air quality conference in 2016 to help raise awareness of air quality and to help forge new relationships with partners interested in air quality work.	Camden has held two joint conferences with LB Islington to help promote air quality awareness and highlight best practice success stories. Camden will host another conference in 2016 to help increase awareness of air quality across the borough and also bring interested partners and stakeholders together to work collaboratively on this issue.	2016	- Improvements in levels of awareness and understanding - Helps to improve policy and context for reducing emissions - Up to date evidence base for new policies

Action	Detail	Time-frame	Outcome
Section 5: Lobbying and partnership working			
57. Continue to support measures introduced by the Mayor of London and national government to improve air quality.	This includes working in joint projects, attending meetings, responding to consultations, and taking an active role in air quality management in London.	Ongoing	- Helps to improve policy and context for reducing emissions - Help leverage funding for projects to improve air quality levels
58. Continue to partner with other local authorities to lobby TfL and the GLA on reducing air pollution from taxis and buses.	Continue to work to improve the environmental performance of large sources of emissions that are outside of the direct control of the council.	Ongoing	- Helps to improve policy and context for reducing emissions - Reduce emissions from road transports
59. Support the GLA and TfL on the introduction of the Ultra Low Emission Zone (ULEZ), but continue to press for the scheme to be improved to further reduce air pollution.	While supporting the principle of the ULEZ, Camden has repeatedly argued for that the scheme could be geographically wider, stricter, and brought in sooner than the GLA have proposed. While Camden will work to implement the proposed ULEZ, it will do so while continuing to work for the scheme to be improved to benefit the health of Camden's population as far as possible.	Ongoing	- Helps to improve policy and context for reducing emissions - Reduce emissions from road transports

Action	Detail	Time-frame	Outcome
60. Lobby national government to provide further financial and strategic support for local authorities to improve air quality, and lobby for further action on national policies on diesel vehicles such as changes to road tax and a national diesel scrappage scheme.	This work could be undertaken in conjunction with other London boroughs, the GLA, or with local partners and major stakeholders. Progress towards this action could be made through direct lobbying, through meetings and other forums, or through official responses to consultations.	Ongoing	- Helps to improve policy and context for reducing emissions - Help leverage funding for projects to improve air quality levels
61. Continue to partner with other major stakeholders and partners to lobby TfL and the GLA on improving air quality on Euston Road and other parts of the TfL Road Network.	Camden's concerns over air quality around the Euston Road are shared with a number of major business partners located around the area and health organisations based in the borough. Camden will continue to work with partners to lobby and hopefully partner with the GLA and TfL to reduce air pollution caused by the TfL road network.	Ongoing	- Helps to improve policy and context for reducing emissions - Reduce emissions from road transports



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