July 2013

Cleaner Air for London

Progress report on the delivery of the Mayor's Air Quality Strategy

CLEANERAIR FOR LONDON

MAYOR OF LONDON

Greater London Authority

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Cleaner air for London

1. Introduction

The Mayor of London is committed to improving air quality in London. In 2010 he published his Air Quality Strategy, "Clearing the Air". Policy 15 committed to report back regularly on the progress made delivering the strategy.

This progress report is the first such report and includes:

- information on recent air quality monitoring and modelling, including the latest version of the London Atmospheric Emissions Inventory (section 2);
- an update on the implementation of both the transport and non-transport policies included in the Strategy (section 3)
- next steps in implementing the Strategy and additional air quality measures the Mayor announced since its publication, as well as action to be taken at the national and European level (section 4).

In keeping with the policies set out in the Strategy, on 13th February the Mayor announced an additional suite of measures to be delivered in his second term and up to 2020. These build on the achievements to date and are an ambitious and integrated package designed to put London on a trajectory to a sustainable low emission future. Further information about these are included in section 4.

The Mayor has continued to work with the London boroughs, Government and European Commission to ensure the right resources, policies and tools are available to help improve air quality. In addition, the Mayor has worked with a wide range of other stakeholders and partners including business improvements districts, voluntary organisations, schools, public health officials and the NHS. This approach underpins the Mayor's firm belief that action is required at all levels if we are to continue to tackle emissions, reduce exposure and increase awareness and ensure that London has the air quality it deserves.

2. London's emissions and air quality

London's air quality has improved dramatically since the 1950s when legislation was introduced to prevent the infamous 'pea souper' smogs that blighted the capital. But despite this, air pollution is still an issue for Londoners, affecting health and everyday quality of life. Since the Mayor's Air Quality Strategy has been published, Defra has reported that London now meets the PM_{10} requirements set by the European Commission. However, along with many other European cities, parts of London are not meeting EU targets for nitrogen dioxide (NO_2).

Emissions

The London Atmospheric Emissions Inventory (LAEI) is a tool developed by the Greater London Authority (GLA) and Transport for London (TfL) to model emissions and air quality in London and is used to shape policy and monitor progress. The LAEI underwent significant methodological improvements for its latest release (known as "LAEI 2010"). Assumptions informing all source emissions were updated and new sectors added (for example for Non-Road Mobile Machinery). The most significant changes to the emissions calculations method are discussed below:

- *Road Transport – Oxides of Nitrogen (NO_x) emissions functions*

  Previous updates to the LAEI (e.g. for LAEI 2008) have largely consisted of updating the 'activity data' in the inventory, such as road traffic vehicle kilometres, leaving most of the assumptions (emissions functions and vehicle fleet compositions) underlying the emissions calculations unchanged. In recent years however it has become apparent across Europe that these assumptions are not accurately reflecting actual conditions, for example the impact of the advancing 'Euro' emissions standards on the emissions performance of road vehicles. In Spring 2012, the Department for Environment, Food and Rural Affairs (Defra) adopted an alternative set of emissions factors for oxides of nitrogen (NO_x) for road vehicles – the COPERT4 dataset, as well as new statistics on the road vehicle fleet composition, particularly reflecting new assumptions about the proportion of diesel-fuelled vehicles. These factors are thought to better reflect actual emissions performance and consequently contribute to the expectation that London will not comply with NO_2 EU limit values in the near future.

- *Road Transport – Non-exhaust PM_{10}*

Over recent years there has been a growing disparity between the estimates of expected PM_{10} concentrations obtained through modelling and the actual measured results, the problem being particularly acute at roadside locations. Whilst this has not significantly affected the assessment of PM_{10} concentrations for policy development purposes, as air quality models account for the 'missing' PM_{10}, it has meant that modelling has had to rely on unsatisfactorily large 'calibration factors' to correct for the disparity. It was also clear that there was a significant component of road transport PM_{10} that was not adequately characterised and, as policies such as the London Low Emission Zone increasingly reduce exhaust PM_{10}, future policy development would increasingly need to target non-exhaust sources.

Research on this issue has concluded that non-exhaust road transport sources of PM_{10} are of much greater importance to road transport emissions than previously accounted for. Using evidence derived from speciation studies (the chemical composition of particulate) the contribution of road vehicle tyre and brake wear has been recalculated for London. In addition, the inclusion in the 2010 inventory of re-suspended PM_{10} (roadside dust that is re-entrained by passing vehicles or wind) has helped to close the gap between the modelled and monitored concentrations.

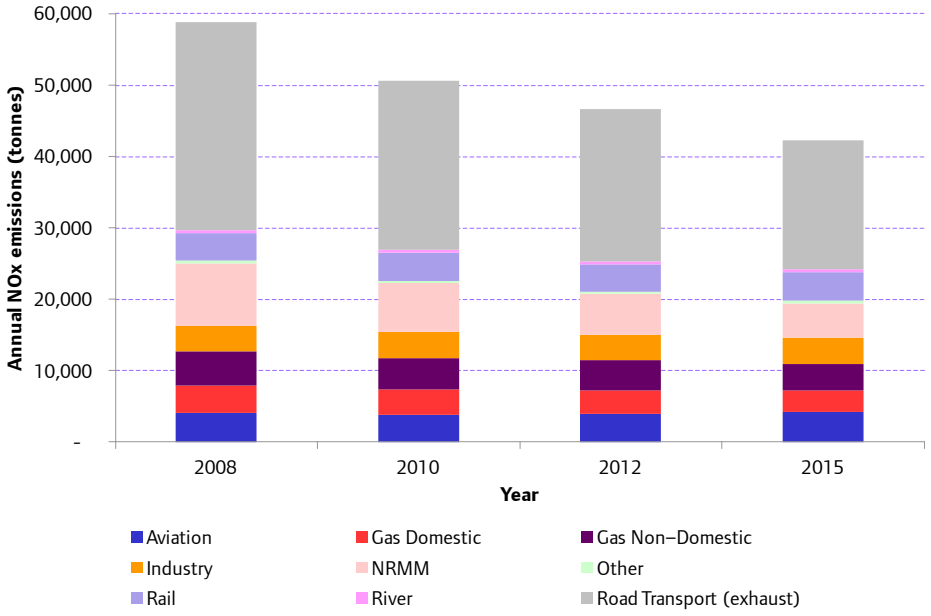
- *Building emissions – Domestic Gas*

There is a large difference between the domestic gas NO_x emission factors used in the LAEI 2008 and the LAEI 2010. The updated 2010 emission factors were obtained from the UK Emissions Factor Database and were used in calculating the emissions from the gas demand data in the National Inventory (NAEI). The latest emissions factors take account of newer boiler technologies. Using the updated LAEI trends in emissions can be derived. Figures 1 and 2 show the breakdown in emissions for 2008, 2010, 2012 and 2015 from the LAEI 2010. Between 2008 and 2012 total emissions reduce by around 20% and 15% for NO_x and PM_{10} respectively. Work is underway to fully understand the contribution of London building stock to pollutant emissions.

- *Non-Road Mobile Machinery / construction*

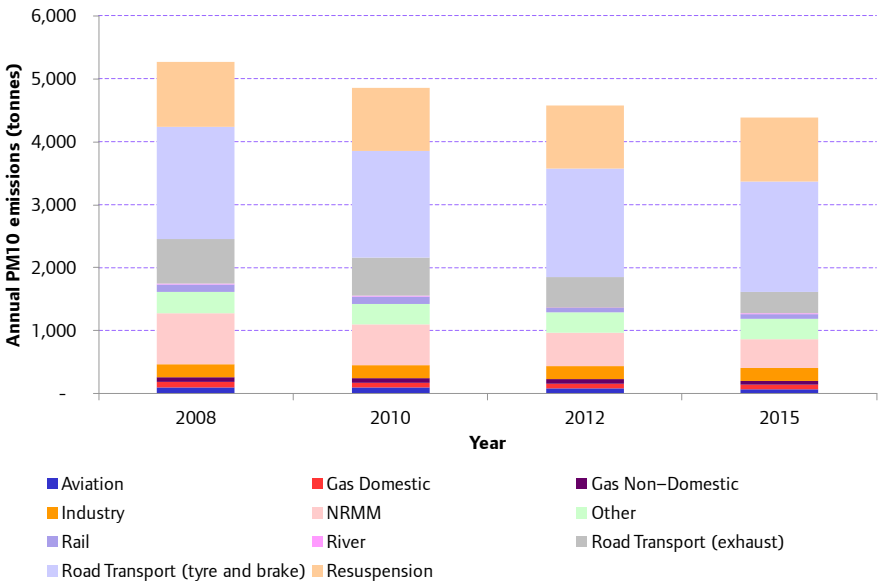
For the first time the LAEI has included an assessment of the contribution from Non-Road Mobile Machinery and construction activity, based on estimates used in the NAEI.

Figure 1 NO_x emissions by source



Source: LAEI 2010

Figure 2 PM_{10} emissions by source



Source: LAEI 2010

Air quality monitoring

The following figures from the LAEI 2010 show improvements in concentrations between 2008 and 2010 (both verified using monitoring data) with further improvements projected up to 2015. As a result of the methodological improvements, construction sites and their associated non-road mobile machinery emissions are now represented in the inventory. These sites are clearly identifiable within the maps below, in particular in the PM_{10} modelling.

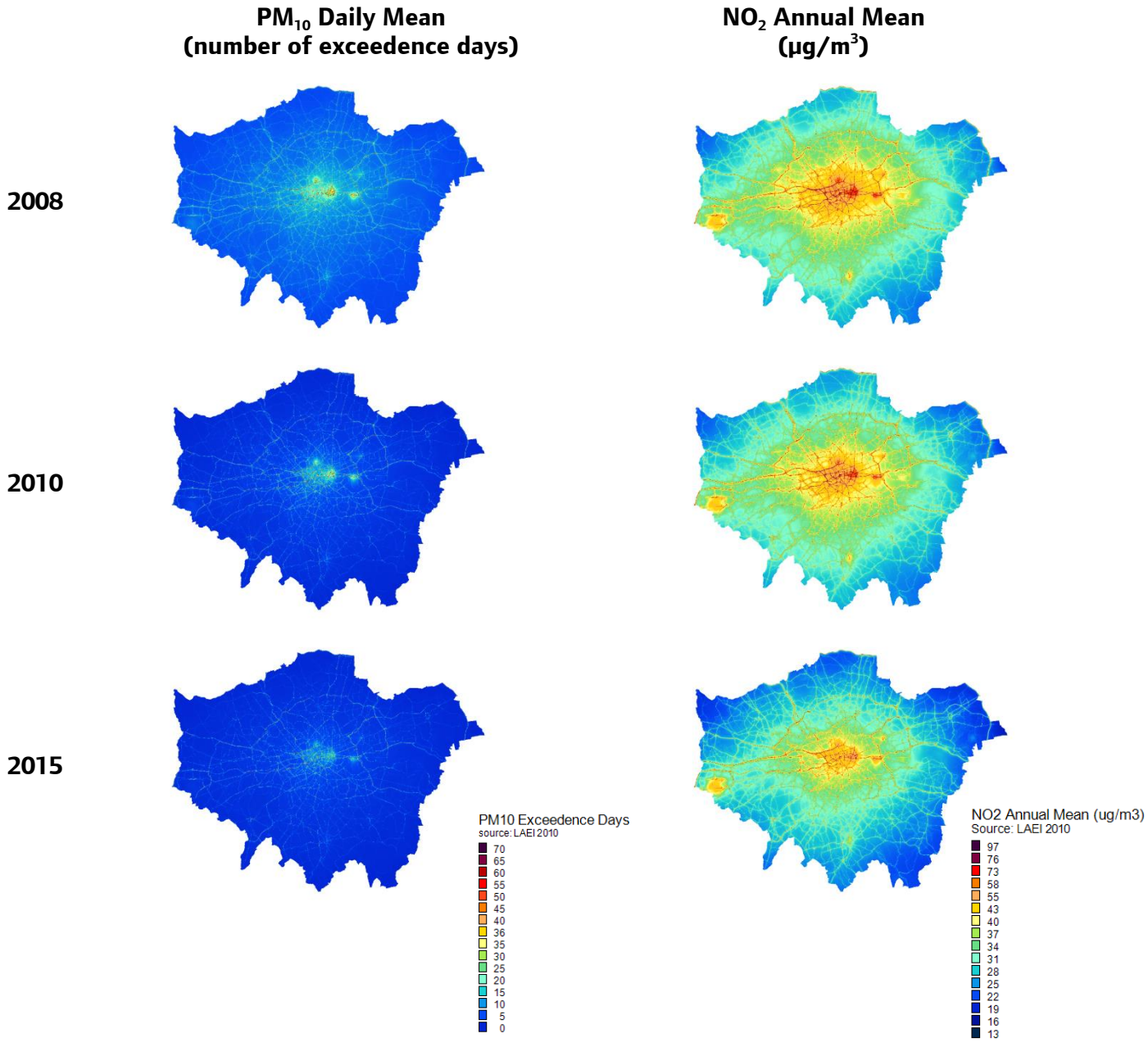


Figure 13 below shows the 15-year trend for measured concentrations of five pollutants in London's air – oxides of nitrogen (NO_x), nitrogen dioxide (NO_2) and particulate matter (PM_{10}), carbon monoxide (CO) and sulphur dioxide (SO_2). Bearing in mind that the lines represent an average of all measurements across London, including monitoring sites with widely differing characteristics, it is seen that:

- Concentrations of NO_x, the principal contributor to atmospheric NO_2, have fallen consistently and significantly over the period. Typical contemporary concentrations are about 40 per cent lower than those of the late 1990s.

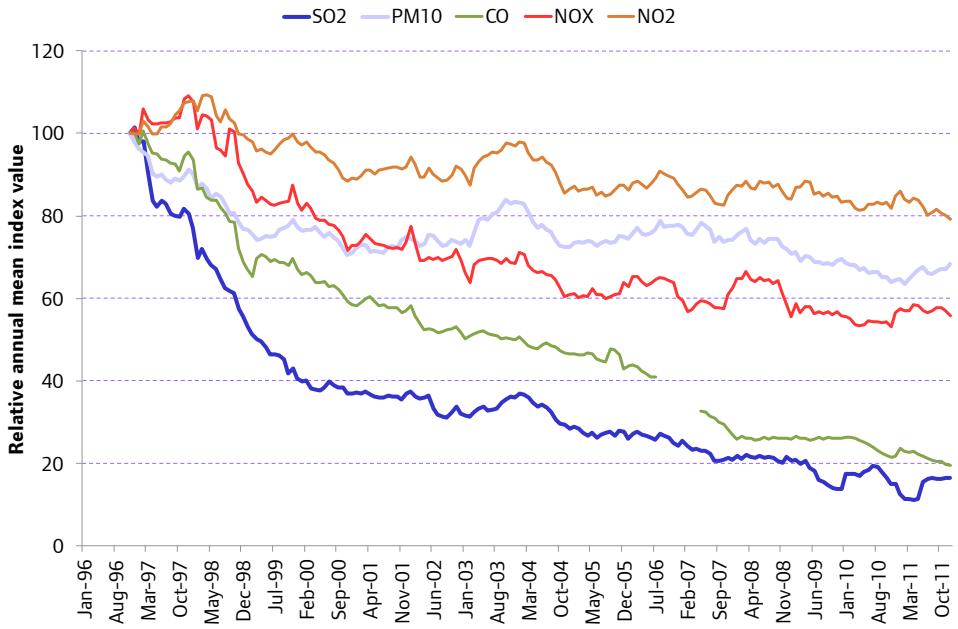
- Concentrations of PM_{10} fell sharply during the early part of the last decade, then tended to stabilise, before more recently resuming a downward trend. Typical current concentrations are about 30 per cent lower than those of the late 1990s.

- Concentrations of NO_2 fell relatively sharply, in parallel with reductions to NO_x, during the late 1990s but then tended to stabilise - and have remained effectively stable since year 2000, despite ongoing reductions to concentrations of NO_x.

- The graphic also shows the impact of the atypical meteorology experienced during 2003 on average concentrations.

Therefore, there has been consistent progress with reducing concentrations of PM_{10}, and NO_x, the principal contributor to atmospheric NO_2. However, this favourable trend has not been reflected in concentrations of NO_2 itself, which have barely changed (on average) over the past 15 years. Many of the reasons for this are now being understood (such as the performance issues with Euro standards) and are now being more accurately reflected in analysis tools like LAEI 2010. In turn, this is helping formulate more effective policies to deliver improvements in air quality in London.

Figure 3 Trend in measured concentrations of key atmospheric pollutants - Greater London average



Source: King's College London and the London Air Quality Network. Units: % relative to year ended Nov 96

Box 1: Air quality and the Olympics

Weather conditions in London during Games time were generally favourable for air quality. Concentrations of PM10 and NO_2 were comparable to those of an equivalent (non-Games) period in summer 2011, albeit in the context of prevailing levels of pollution in London that, for NO_2, exceed air quality limit values. However, a severe Ozone (O_3) episode affecting much of Northern Europe did develop between 23 and 26 July 2012, immediately prior to the first day of the Olympics. A less severe episode developed over the last few days of the Olympics.

These events are not atypical for the Summer period, being caused by the action of sunlight and high temperatures on pollution emitted from vehicles and industry, the reactions taking place over several days as air travelled over continental Europe, gathering pollution, before reaching London. These episodes were not directly linked to the Games or related traffic management arrangements. As suggested by modelling undertaken prior to the Games, there is no clear evidence from the daily concentration data of a differential effect – either favourable or adverse – from the Olympic and Paralympic Route Networks and related traffic management arrangements on air quality in London.

3. Implementing the Mayor's Air Quality Strategy

The Mayor's Air Quality Strategy is divided into 15 policies, each of which contains a number of actions. A progress update against each policy is given below and includes a traffic light ("Red, Amber, Green") summary.

Policies 1-5 relate to transport sources, policies 6-12 relate to non-transport sources, policies 13 and 14 relate to actions to be undertaken by others and policy 15 relates to monitoring and reporting.

Policy 1 – Encouraging smarter choices and sustainable travel	
The Mayor, working with boroughs and stakeholders, will support Londoners and those working in and visiting the capital in making behavioural changes to the way they travel to reduce emissions and will promote more efficient use of vehicles.	
Progress: • TfL has supported car club expansion and has helped London become the second largest car club market in the world with over 2,400 car club vehicles and over 120,000 members. The huge growth of car club numbers means that 83 per cent of car club members in the UK live in London, while 46% of Londoners are within a five minute walk of a car club vehicle. • The Mayor recently announced his vision for cycling in London. This is accompanied by an unprecedented level of spend in the TfL Business Plan at nearly £1bn over the next ten years. • The Legible London network is continuing to expand, supported by third party funding and the Borough Local Implementation Plan (LIP) programmes. Approximately 500 signs have been installed to date. • Clear information about emissions, including normalised factors for public transport modes is published annually in TfL's Health Safety and Environment Report. • Following the success of the behavioural change campaign at the 2012 Games, the Olympic and Paralympic Transport Legacy Action Plan was published in 2012. This includes an action to examine the opportunities and lessons learned from Games time travel demand management (TDM).	

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Policy 2 – Promoting technological change and cleaner vehicles	
The Mayor, through TfL, working with the Government and boroughs will promote the transfer to and use of low emission vehicles for private and freight transport.	
Progress: • TfL is developing a Low Emission Vehicles Strategy. • Source London – the Capital's electric vehicle charging network - now has over 1300 charge points (twice as many charge points as petrol stations in the Capital). This is key to building confidence and boosting the new electric vehicle (EV) market. • The GLA has secured grant funding from the Technology Strategy Board to explore low emission vehicle options for freight. • Introduced a new tighter Ultra Low Emission Discount for the congestion charge, replacing the existing discount and ensuring that only the greenest zero or ultra-low emission vehicles driving into the capital receive a 100 per cent discount. • TfL is currently involved in a number of European funded projects to share best practice and support the development of vehicle technology and freight solutions across the EU. These projects include FREVUE, which involves supporting use of electric freight vehicles in urban Europe; CAPIRE, which involves developing roadmaps to foster road transport electrification, including clean city logistics and LaMiLo, which will develop innovative solutions to make Last Mile Logistics operations more effective, sustainable and easier for private companies and end users.	

Policy 3 – Priority locations and local measures	
The Mayor, through TfL and working with the boroughs, will introduce targeted local measures to improve air quality at locations with high air pollution concentrations.	
Progress: • From 2011-2013, the GLA secured £5m of Defra funding for TfL to implement the Clean Air Fund, a mechanism for trialling innovative measures at locations most at risk of exceeding PM_{10} limit values.	

- TfL is supporting the expansion of competitive rail-based alternatives to aviation, including a national high-speed rail network. The Mayor also continues to oppose additional runway capacity at Heathrow.

- The Mayor recognises that further work needs to be done to tackle local air quality issues at major transport interchanges in relation to road use (e.g. airports and Network Rail).

Box 2: The Clean Air Fund

From 2011-2013, TfL secured £5m of Defra funding to implement the Clean Air Fund, a mechanism for trialling innovative measures at locations most at risk of exceeding PM10 limit values. The programme was successful in delivering a wide range of innovative measures that have helped in improving air quality in PM10 hotspots in London including:

- Fitting Diesel Particulate Filters (DPF) on 120 buses. Results from the programme have shown that DPFs deliver a reduction of up to 77 per cent PM10 exhaust emissions at source.

- A 'No Engine Idling' campaign to educate and raise awareness with drivers. The report has shown a 25 percent increase in driver awareness since the campaign was launched. An on-street engine idling survey was carried out before and after the campaign; HGVs saw a 16 per cent reduction in PM10 emissions, cars saw a 13 per cent reduction, taxis saw a 12 per cent and coaches saw an 11 per cent reduction. The programme also included the deployment of five taxi marshals to ten mainline stations to encourage drivers to switch off their engines whilst stationary. There was a nine per cent observed reduction in engine idling at the marshalled taxi ranks.

- As part of the Green Infrastructure programme, two green walls, one at Edgware Road Tube station on Marylebone Road and the other at The Mermaid building on Upper Thames Street were installed. Other green infrastructure included 50 planted towers on Thames Street, more than and 600 new street trees and additional shrubs planting along the Transport for London Road Network, in identified PM10 hotspots.

- The trial of Cleaning and Applications of Dust Suppressants (CADS) was expanded as part of the CAF programme to six road corridors as well as six industrial waste sites and two construction sites. Evidence from the studies has shown that Upper Thames Street saw a reduction of 16 per cent in PM10 concentrations after treatment and some of the industrial sites saw drops in local concentrations of between 31 per cent and 59 per cent after treatment.

Policy 4 – Reducing emissions from the public transport fleet	
The Mayor, through TfL and working with the Government, boroughs and transport operators, will minimise emissions from London's public transport system.	

Progress:

- TfL requests a range of measures in procurement for contractors' support fleets, using the TfL Support Fleet Environmental Policy. This includes Euro Standards and low carbon requirements.

- TfL has eight New Bus for London prototype vehicles in service. The new bus produces around one quarter of the PM and NO_x of the fleet average hybrid bus, and 20 per cent less CO_2. It is also more fuel efficient. The Euro VI engine fitted to the buses from 2014 will deliver even lower PM and NO_x emissions.

- By 2015, all TfL buses will meet the Euro IV standard for PM_{10} and NO_x. Around 900 Euro III buses are being retrofitted with selective catalytic reduction (SCR) equipment to reduce their NO_x emissions.

- TfL currently has five hydrogen buses in service, rising to eight later in 2013.

- From 2012, all new taxis entering the fleet must meet a minimum Euro 5 standard. This is in addition to a 15 year rolling age-based limit for all licensed vehicles.

- From 2012, all new private hire vehicles entering the fleet must meet a minimum Euro 5 standard. This is in addition to a 10 year rolling age-based limit for all licensed vehicles.

- The full fleet of rolling stock for the operation of the London Overground was in service by the end of 2010 and met the latest European standards on emissions. Any requirement for new stock in the future will require latest standards to be attained.

Box 3: Cleaning up London's bus fleet

London's buses are the most used public transport mode and are responsible for around a fifth of all daily journeys in the Capital. They carry more than 2.3 billion passengers a year – more than at any time since 1960. There has been a 40 per cent growth in bus kilometres since 2000 and as a result, the TfL bus fleet now contains 8,500 vehicles.

Despite this increase in vehicles, emissions of PM from TfL buses have reduced from 200 tonnes a year in 1997 to 17 tonnes today. However, these vehicles account for 20% of all NOx emitted by road transport in London – even though they represent only 2% of all kilometres driven. In central London, this disproportion is even higher.

Since the publication of the Mayor's Air Quality Strategy, TfL has:

- Created the youngest bus fleet of any major European or world city (average bus age is 6 years);
- Delivered Europe's largest hybrid bus fleet with more than 420 hybrid buses on London's roads today;
- Developed the New Bus for London;
- Installed filters on all buses made before 2005 to reduce their particulate matter (PM) emissions;
- Trialled innovative new technologies like hydrogen;
- Developed, tested and commenced the installation of selective catalytic reduction (SCR) equipment to circa 900 buses to reduce NOx emissions.

Over the forthcoming TfL Business Plan period, TfL will:

- Grow the hybrid fleet to 1700 by 2016, including 600 of the iconic New Bus for London
- Deliver the world's largest bus retrofit programme to reduce NOx emissions from a further 900 older buses by up to 90%. The programme commenced in late 2012 and will be completed by March 2014.
- Commence a pilot programme using biodiesel in 10 bus depots. The pilot of fitting biodiesel tanks and operating the buses will take place from 2013.
- Ensure that the cleanest buses go through London's air pollution hotspots. TfL identified 187 air quality focus areas where high concentrations of NO2 coincide with high levels of human exposure, e.g. along high streets, near schools and at hospitals.
- Continue to trial innovative new technology. This will involve pure electric buses from 2013 and range-extended diesel-electric hybrid buses from 2014.

Policy 5 – Schemes that control emissions to air	
The Mayor, through TfL, will continue to operate the Low Emission Zone (LEZ) for HGVs, buses and coaches and will tighten the standards to include NO_x – subject to technical feasibility and Government support. The Mayor will introduce emissions standards for PM for heavier LGVs and minibuses alongside a tougher standard for PM for HGVs, buses and coaches.	
Progress: • TfL implemented Phase 3 of the LEZ (Euro 3 for PM for heavier van and minibuses, with 98% of these vehicles now meeting this standard) and Phase 4 of the LEZ (Euro IV for PM for HGVs, buses and coaches, with 96% of these vehicles now meeting this standard) in 2012. • By 2015, all TfL buses will not only meet the LEZ PM_{10} requirement but also an equivalent Euro IV emission standard for NO_x.	

Non Transport Measures

Policy 6 – Reducing emissions from construction and demolition sites	
The Mayor will work with London boroughs, the GLA Group and the construction industry to encourage implementation of the Best Practice Guidance for construction and demolition sites across London.	
Progress: • Working with the Environment Agency, the GLA and TfL have supported the trial of dust suppressant technology at construction and industrial sites. • The GLA contributed to the development of the Institute of Air Quality Management's new "Guidance on the Assessment of the Impacts of Construction on Air Quality and the Determination of their Significance", published in December 2011. • The GLA will shortly publish for consultation Supplementary Planning Guidance (SPG) on the control of dust and emissions from construction and demolition. It is expected that the SPG will be officially be adopted by the end of 2013. This will include proposals to address Non Road Mobile Machinery and to support the further roll-out of dust suppressants at construction sites.	

Policy 7 – Using the planning process to improve air quality	
The Mayor will ensure that new developments in London shall as a minimum be 'air quality neutral' through the adoption of best practice in the management and mitigation of emissions.	
Progress: • The Mayor published the London Plan in summer 2011, which includes policies to make new proposals 'air quality neutral' as a minimum. • Supplementary Planning Guidance, due to be published for consultation in Summer 2013 and expected to be officially adopted by the end of 2013, will provide further advice to boroughs and developers on applying the 'air quality neutral' principle.	

Policy 8 – Maximising the air quality benefits of low to zero carbon energy supply	
The Mayor will ensure that low to zero carbon energy sources in London do not contribute to the deterioration of local air quality through the adoption of best practice in the management and mitigation of emissions.	
Progress: • The GLA will shortly be publishing for consultation emission standards for new biomass boilers and Combined Heat and Power (CHP) systems. Once the consultation period has been completed these standards will be published within the Sustainable Design and Construction SPG by the end of 2013.	

Policy 9 – Energy efficient buildings	
The Mayor will encourage the retrofitting of existing homes and workplaces to make them as energy efficient as possible in order to reduce NO_x emissions from gas heating systems.	
Progress: • To date the RE:NEW programme has installed retrofit measures in 92,000 homes in London. The GLA is proposing to establish a long-term resource available to London boroughs and social housing providers, that will facilitate and enable the process of procuring domestic retrofit projects.	

- RE:FIT, the Mayor's public sector buildings programme, has to date retrofitted over 110 buildings. Over 70 public sector organisations have signed up to work wth the RE:FIT team.

- The ODA Schools RE:FIT pilot retrofitted 12 primary and secondary schools reducing energy costs and CO2 by over 30% and achieving a four year payback period. The next phase of the programme has now been launched, aiming to retrofit over 200 schools in the next three years.

Policy 10 – Improved air quality in the public realm	
The Mayor will encourage the improvement of air quality in the public realm by planting urban vegetation to trap particulate matter, using his influence to increase green cover in the private and public realms and by discouraging anti-social burning and the illegal use of word burning stoves to reduce smoke annoyance.	
Progress: • A major programme of planting has been undertaken at priority locations (see Policy 3). • Advice on using wood burning stoves that are exempt from Smoke Control Area restrictions, as well as on avoiding burning waste, are available on the GLA website and the Cleaner Air for London website. • A pilot programme of creating clean air zones at seven pilot schools in four boroughs is underway. This will include the installation of energy efficiency, green infrastructure and sustainable transport measures. Installation is expected to take place in the summer of 2013.	

Policy 11 – Encouraging innovation	
The Mayor will promote research into the causes and effects of air pollution in London, testing new techniques for improving air quality and encouraging their use when they are proven to be effective.	
Progress: • The GLA helped to reform and is co-chair of the Air Pollution Research in London (APRIL) group, which brings together policy makers and academics to investigate	

issues that impact directly on air quality in the capital. In January 2013 the GLA hosted the "Cleaner Air Conference" with APRIL and Environment Protection:UK.

- Through the Local Air Quality Management (LAQM) process, the Cleaner Air for Boroughs programme and the air quality seminars programme the GLA is spreading best practice across boroughs.

- In February 2011, the GLA published a report into the monitoring network in London, which will help to inform developments and improvements to the network.

- In May 2013 the GLA will publish the London Atmospheric Emissions Inventory (LAEI) 2010, utilising the latest available research, emission factors and understanding of air pollution.

Policy 12 – Raising public awareness of air quality issues	
The Mayor will encourage individuals to take action to improve air quality and will encourage the provision of targeted information about air quality to people most at risk from the health effects of air pollution.	

Progress:

- The GLA and London boroughs are producing a new Cleaner Air for London website. The site will provide information and guidance to a range of audiences about air quality in the Capital.

- The GLA promotes and provides general funding to airTEXT, which provides information on air pollution to vulnerable Londoners. In addition the GLA has part funded a project to improve the range of airTEXT forecasts, and is currently working on a project to develop a Black Carbon Alert Service.

- To maximise the opportunity of the public health agenda being managed locally the GLA has produced bespoke air quality guidance documents for public health professionals containing borough-specific information. The GLA is also actively working with boroughs to promote the inclusion of air quality into borough Joint Strategic Needs Assessment documents and Health and Wellbeing Strategies.

- The GLA is delivering a Cleaner Air Champions Programme to train volunteers in partnering boroughs to become air quality advocates and to raise awareness of air quality, mitigation and adaptation strategies in their localities.

- As part of the Clean Air Fund, TfL ran a major "no engine idling" awareness campaign. Observed engine idling on-street in the three MAQS PM_{10} priority locations was significantly lower amongst certain vehicles by November 2012. There was less engine idling observed in coaches (-11%), HGVs (-16%), taxis (-12%) and cars (-13%) at three central London priority locations.

Actions by others

Policy 13 – Working with Government and other authorities	
The Mayor will encourage the development and implementation of proposals and action plans by the Government and other authorities aimed at achieving EU emissions (PM_{10}, $PM_{2.5}$ and NO_2) limit values in Greater London.	

Progress:

- The GLA secured £5m from the Department for Transport (DfT) to fund the trial of local measures as part of the Clean Air Fund (see policy 3)
- The GLA secured £5m from DfT, match-funded by £5m from TfL, to fund the SCR retrofit of 900 Euro III buses (see policy 4).
- £23m has been secured from the DfT Green Bus Fund to support the roll out of hybrid buses in London.
- The Mayor continues to lobby Government for more resources and action at the national level, highlighting that he alone cannot solve London's air quality challenge.
- The Mayor has helped establish the Air Quality Initiative of the Regions (AIR) Group, with eleven European regions facing similar air quality challenges to London to lobby the European Commission for additional resources and action at the European level.

Policy 14 – Working with boroughs	
The Mayor will assist boroughs in carrying out the exercise of their statutory duty to improve air quality in London	
Progress: • The Mayor has published changes to the Local Implementation Plan (LIPs) guidance, which now highlights air quality as a key consideration in the assessment criteria. Building on the success of LIPs, the Mayor announced a new dedicated £20m Mayor's Air Quality Fund, with the first £6m for the next three years to be allocated this June (see section 4). • Working with Defra, the criteria for their Air Quality Grants programme has been changed to provide further resources and ensure better coordination for borough-led air quality programmes. • Additional support is being provided to borough air quality officers, including a dedicated half-day event on the Local Air Quality Management process. • To increase the resources available at the borough level the Mayor has launched the Cleaner Air Borough scheme. This includes a seminar programme to raise awareness amongst council officers such as transport, public health and planning officers about air quality and the policies they can put in place to tackle it.	

Policy 15 – Monitoring progress and reporting	
The Mayor will monitor changes to air quality in London and will take additional action where necessary to implement the policies and proposals of the National Air Quality Strategy and achieve relevant EU limit values in Greater London.	
Progress: • As part of the new Cleaner Air for London website, the GLA has created one location where Londoners can now access all the air quality data recorded by monitoring station across London. • On 13th February the Mayor announced an additional package of air quality measures to be delivered in his second term and up to 2020 (see section 4).	

4. Next steps: Additional measures for the Mayor's second term

As set out in Section 2 the measures adopted by the Mayor have already led to significant reductions in emissions since 2008. However, more work needs to be done if London is to meet the EU limit values for NO_2 and to continue reducing human exposure and the impact on public health of pollutants like particulate matter. For this reason, on 13th February 2013, the Mayor announced a package of additional air quality measures to be delivered in his second term and up to 2020, including:

- a new Ultra Low Emission Zone for central London from 2020, subject to a feasibility study
- retiring up to 900 of the oldest Euro III buses in TfL's fleet and replacing them with ultra low emission Euro VI buses
- accelerating the roll out of hybrid buses, with 1,700 on the road by 2016 including 600 of the iconic New Bus for London. This is equivalent to around 20 per cent of TfL's bus fleet
- new measures to clean up construction sites and industrial waste sites
- retrofitting a further 24,000 homes, public buildings and schools with energy efficiency measures
- introducing a new £20m Mayor's Air Quality Fund to support the boroughs in tackling local air quality hotspots.

These measures will be implemented or significantly planned over the current Mayoral term. Further updates on these policies will be included in the next MAQS Progress Report.

In addition the Mayor will continue to work with Government, London boroughs, other stakeholders and all Londoners to tackle emissions, reduce exposure and increase awareness. At the European level the Mayor will work through EUROCITIES and the Air Quality Initiative of the Regions to make the case for additional resources and action to support regional and city efforts to improve air quality.

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Chinese
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Hindi
यदि आप इस दस्तावेज की प्रति अपनी भाषा में चाहते हैं, तो कृपया निम्नलिखित नंबर पर फोन करें अथवा नीचे दिये गये पते पर संपर्क करें

Vietnamese
Nếu bạn muốn có văn bản tài liệu này bằng ngôn ngữ của mình, hãy liên hệ theo số điện thoại hoặc địa chỉ dưới đây.

Bengali
আপনি যদি আপনার ভাষায় এই দলিলের প্রতিলিপি (কপি) চান, তা হলে নীচের ফোন্ নম্বরে বা ঠিকানায় অনুগ্রহ করে যোগাযোগ করুন।

Greek
Αν θέλετε να αποκτήσετε αντίγραφο του παρόντος εγγράφου στη δική σας γλώσσα, παρακαλείστε να επικοινωνήσετε τηλεφωνικά στον αριθμό αυτό ή ταχυδρομικά στην παρακάτω διεύθυνση.

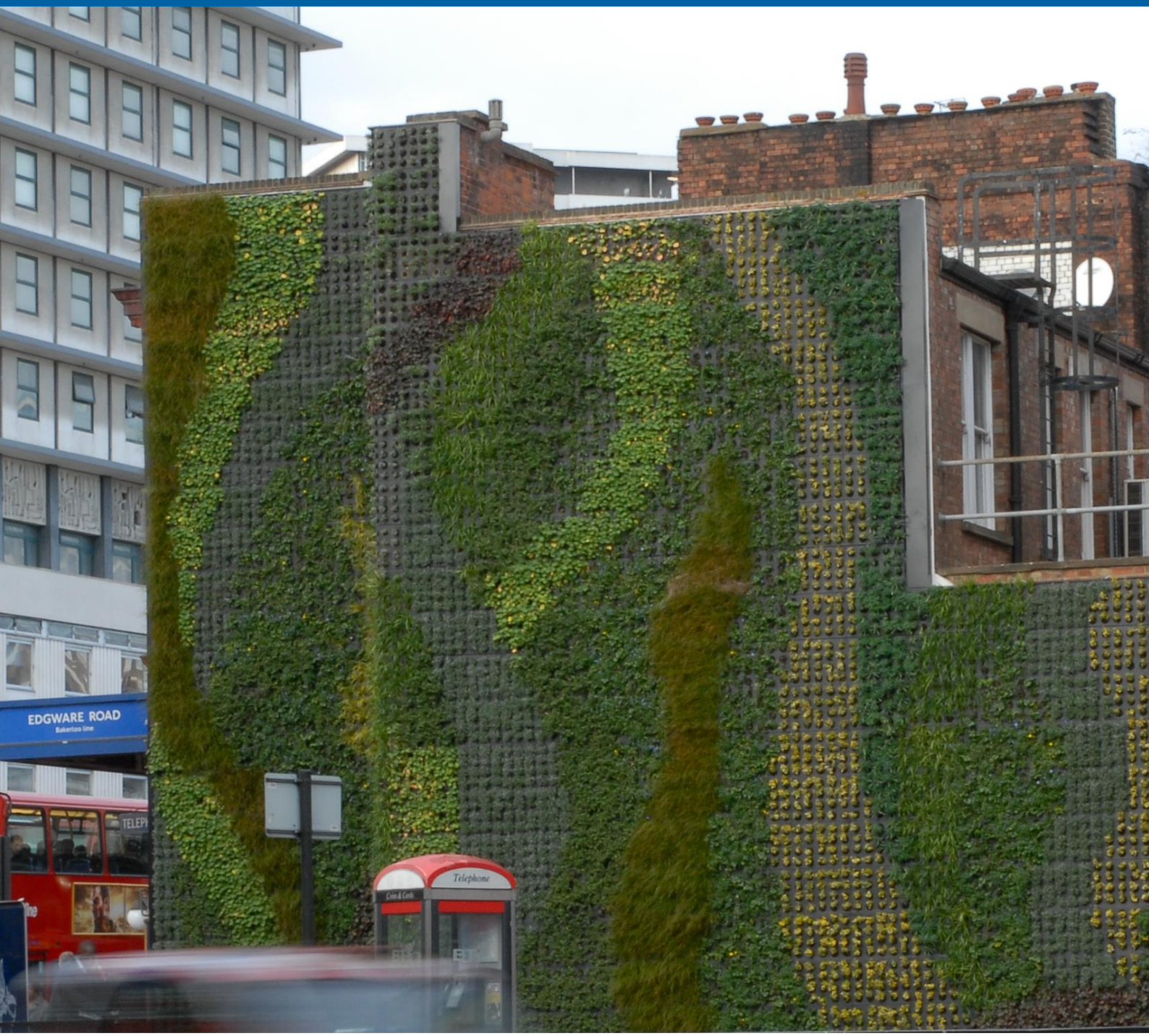
Urdu
اگر آپ اِس دستاویز کی نقل اپنی زبان میں چاھتے ھیں، تو براہ کرم نیچے دئے گئے نمبر پر فون کریں یا دیئے گئے پتے پر رابطہ کریں

Turkish
Bu belgenin kendi dilinizde hazırlanmış bir nüshasını edinmek için, lütfen aşağıdaki telefon numarasını arayınız veya adrese başvurunuz.

Arabic
إذا أردت نسخة من هذه الوثيقة بلغتك، يرجى الاتصال برقم الهاتف أو مراسلة العنوان أدناه

Punjabi
ਜੇ ਤੁਹਾਨੂੰ ਇਸ ਦਸਤਾਵੇਜ਼ ਦੀ ਕਾਪੀ ਤੁਹਾਡੀ ਆਪਣੀ ਭਾਸ਼ਾ ਵਿਚ ਚਾਹੀਦੀ ਹੈ, ਤਾਂ ਹੇਠ ਲਿਖੇ ਨੰਬਰ 'ਤੇ ਫ਼ੋਨ ਕਰੋ ਜਾਂ ਹੇਠ ਲਿਖੇ ਪਤੇ 'ਤੇ ਰਾਬਤਾ ਕਰੋ:

Gujarati
જો તમને આ દસ્તાવેજની નકલ તમારી ભાષામાં જોઈતી હોય તો, કૃપા કરી આપેલ નંબર ઉપર ફોન કરો અથવા નીચેના સરનામે સંપર્ક સાધો.



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