Improving London’s air quality

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What has been done?

A number of measures have been introduced since the creation of the GLA in 2000. These include:

• Improvements to public transport, cycling and walking to encourage mode shift to cleaner modes.
• Bus emissions programme – all London buses meet Euro III for PM and diesel electric hybrids being introduced.
• World’s first city-wide Low Emission Zone introduced in 2008 – reduces emissions from HGVs, buses and coaches.
• Taxi emissions programme – all older taxis retrofitted to reduce emissions of PM.
• Construction and Demolition Best Practice Guidance published.
What is the problem? Annual mean PM$_{10}$ concentrations in 2008
PM$_{10}$ emissions sources in central London

2008 Annual PM$_{10}$ emissions in central London (tonnes)

- Other Sources
- Boilers
- Other Agriculture / Nature
- Industrial and Commercial Gas
- Domestic Gas
- HGV, Tyre & Brake Wear
- HGV, Exhaust
- LGV, Tyre & Brake Wear
- LGV, Exhaust
- Bus, Tyre & Brake Wear
- Bus, Exhaust
- Car, Tyre & Brake Wear
- Car, Exhaust
- Taxi, Tyre & Brake Wear
- Taxi, Exhaust
- Motorcycle, Tyre & Brake Wear
- Motorcycle, Exhaust
What is the problem? NO$_2$ concentrations in 2008

Limit Value
NO\textsubscript{x} emissions sources in Greater London

![Bar graph showing NO\textsubscript{x} emissions sources in Greater London. The sources include Other Sources, Rail, Airport, Part A / B Industry, Industrial-Commercial Gas, Domestic Gas, Artic HGVs, Rigid HGVs, LGVs, Buses, Cars, Taxis, and Motorcycles. The data is from 2008.]
Barriers to delivery

- Around 40 per cent of PM$_{10}$ concentrations in central London originate from outside London.

- And around 20 per cent of NO$_2$ concentrations in Greater London originate from outside London.

- 35 per cent of PM$_{10}$ emissions from road transport are from tyre and brake wear – which cannot be regulated.

- Research shows that more recent Euro standards for diesel vehicles have not been as effective as they should have been.

- Mayor lacks policy levers over: wider vehicle fleet using London’s roads, industrial and waste management operations, rail infrastructure, airport operations.

- Lack of funding.
Mayor’s draft Air Quality Strategy

• In March 2010, the Mayor published his draft Air Quality Strategy for public consultation.

• Includes measures to be implemented by the GLA, Government and boroughs which will allow limit values to be met as soon as possible.

• Focussed on reducing emission from transport network, homes and workplaces.

• Consultation closed in August 2010. GLA officials currently analysing responses and modelling of the MAQS impact is underway.

• Final Strategy due to be published later in 2010.
Reducing emissions from transport (1)

New smarter travel schemes – building on existing initiatives
- Promoting eco-driving
- Travel plans (inc freight)
- Anti-idling campaigns and enforcement

Promoting cleaner vehicles
- Electric Vehicle Delivery Plan
- Procurement processes

Tailored action plans for priority locations (from autumn 2010).
- Power washing streets and applying dust suppressants
- Redeploying cleanest buses
- Traffic management

Reducing emissions from public transport
- Bus NO\textsubscript{x} retrofit
- Age based limits for taxis and PHVs
Reducing emissions from transport (2)

Low Emission Zone:
• Tighter standard for lorries, buses and coaches from 2012
• Vans and minibuses included from 2012
• New NO$_x$ standard for lorries, buses and coaches from 2015

Air Quality Action Days and Special Measures
• Special measures during extreme pollution episodes
• Planned regular events to encourage mode shift to cycling and walking.
Reducing emissions from non-transport sources (1)

Updating construction and demolition Best Practice Guidance:
• Review and update early in 2011.
• Giving Guidance statutory status in planning process to assist enforcement
• Ensure included in major planning applications

Better use of planning system:
• New developments to be as a minimum ‘air quality neutral’ – using planning process for ‘offsetting’
• Emissions limits and abatement requirements for new biomass boilers

Energy efficient schemes for homes and workplaces (RE:NEW and RE:FIT)

Urban realm programmes

Encouraging innovation
Reducing emissions from non-transport sources (2)

Raising awareness

• Develop a London-wide information source, e.g. website for public

• Working with third parties on information campaigns

• Support raising awareness schemes such as airText and WalkIt website – Londoner’s taking responsibility for their health

• Targeted publicity campaigns for those at risk – doctors surgeries, pharmacies etc.
What this will achieve – PM$_{10}$

- 13% reduction from 2008
- 33% reduction from 2008
What this will achieve – NOx

35% reduction from 2008
Working with Government

We believe that PM$_{10}$ limit values will be met by 2011.

But on its own London cannot meet NO$_2$ limit values by 2015.

London requires funding from UK Government to implement fully the Mayor’s Strategy.

UK Government needs to implement national measures:

- Extended vehicle scrappage schemes
- Use of tax incentives
- Certification scheme for NOx abatement equipment
- National framework for LEZs – and financial support
- Grant schemes for vehicle retrofit
- Rail electrification
- Funding for new low-emission technology
- Funding for and restructuring of energy efficiency schemes
- Publicity campaigns
- Targeted information to those at risk.
Next Steps

Final Mayor’s Air Quality Strategy to be published later in 2010.

Priority location measures (eg. dust suppression) to commence in October 2010.

Ongoing discussions with Government re. funding for full implementation of Strategy.

Working with Government to develop NO$_2$ Action Plan for London as part of NO$_2$ time extension application. Application expected in summer 2011.
Thank you

More information at: www.london.gov.uk
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