

**Government is lobbying to 'remove' European
air pollution law requiring 50% reductions now**

**Friends of the Earth conference
London: 15 September 2012**

Simon Birkett, Founder and Director, Clean Air in London

www.twitter.com/CleanAirLondon

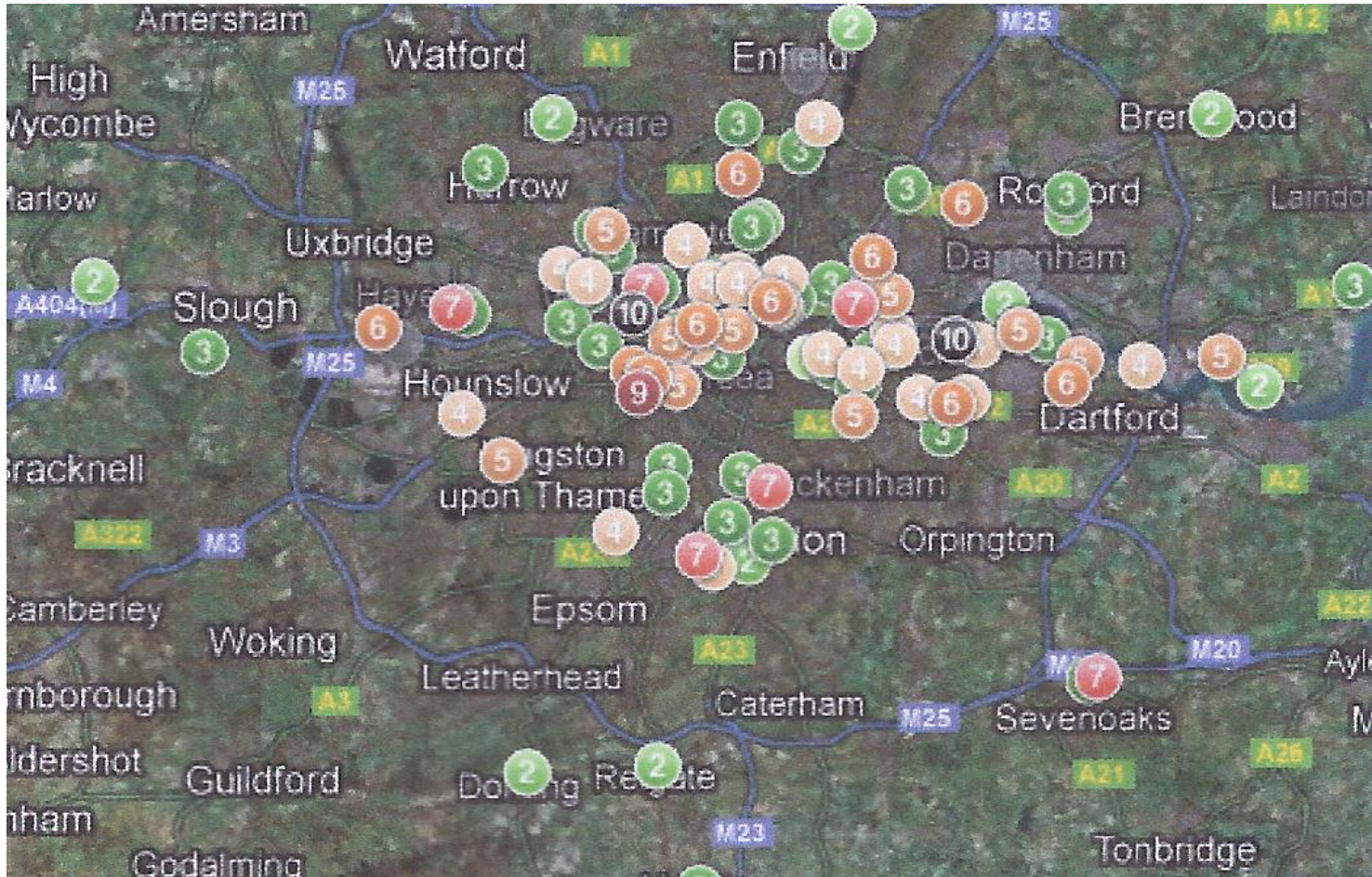
www.cleanairinlondon.org

Introduction to air pollution

- Health impacts dwarf those known during Great Smog in 1952
- Over twice legal limits and World Health Organisation guidelines near our busiest streets. Laws in place since 1999 for 2010/2011
- Particles: PM_{2.5} and PM₁₀. Combustion gases: nitrogen dioxide (NO₂)
- Health impacts from long and short-term exposure and different types of air pollution. Only smoking causes more early deaths
- Living or going to school within 150 metres of roads carrying over 10,000 vehicles per day could be responsible for 15-30% of all new cases of asthma in children and COPD in adults aged 65 and older
- Diesel causes 91% PM_{2.5} and 95% NO₂ of vehicle exhaust in London
- London and UK have highest levels of NO₂ in Europe

Worst smog episode since 2006 on eve of Olympics

London Air Quality Network www.londonair.org.uk

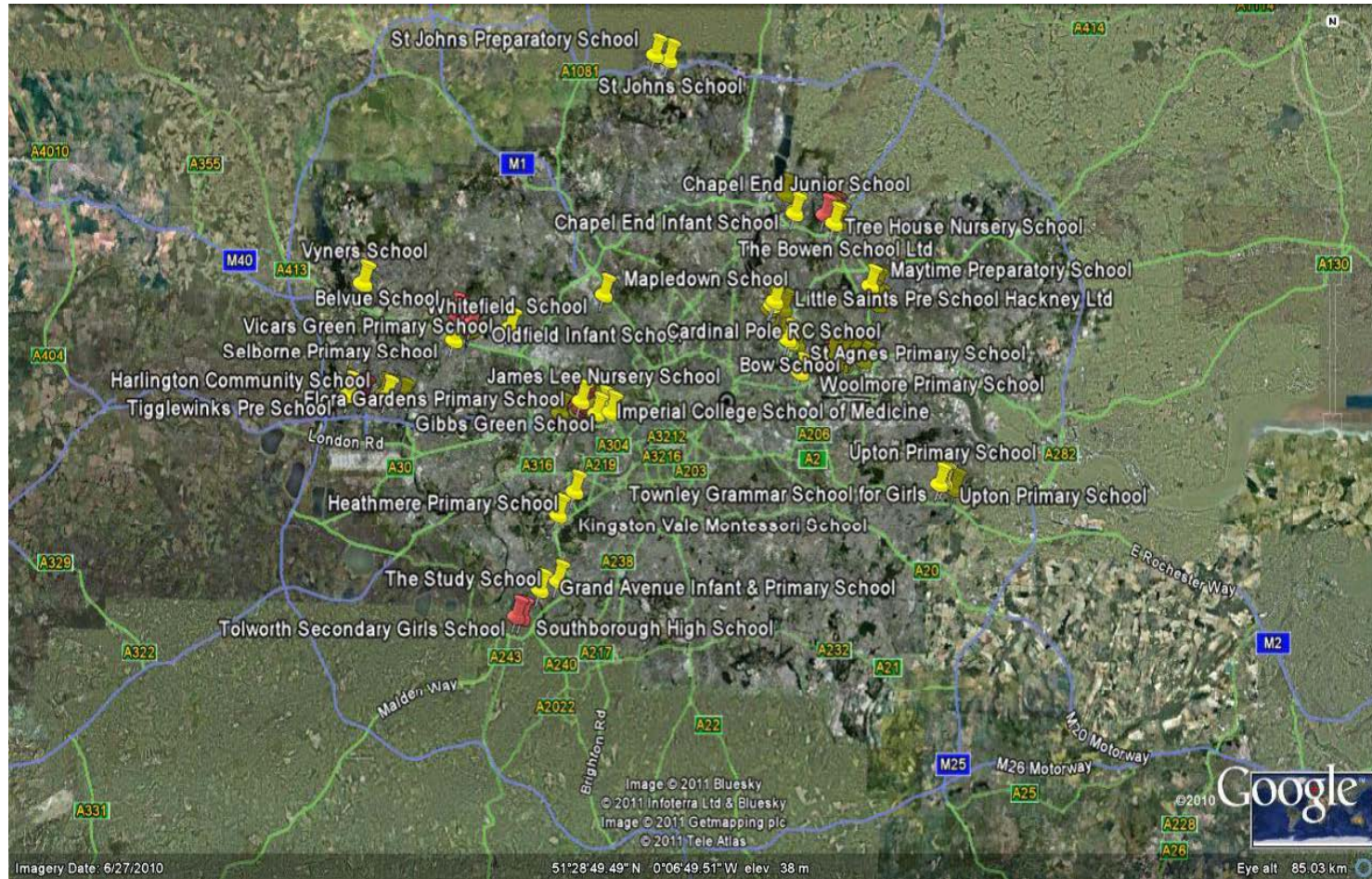


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Clean Air in London

London schools within 150m and 400m of busy roads

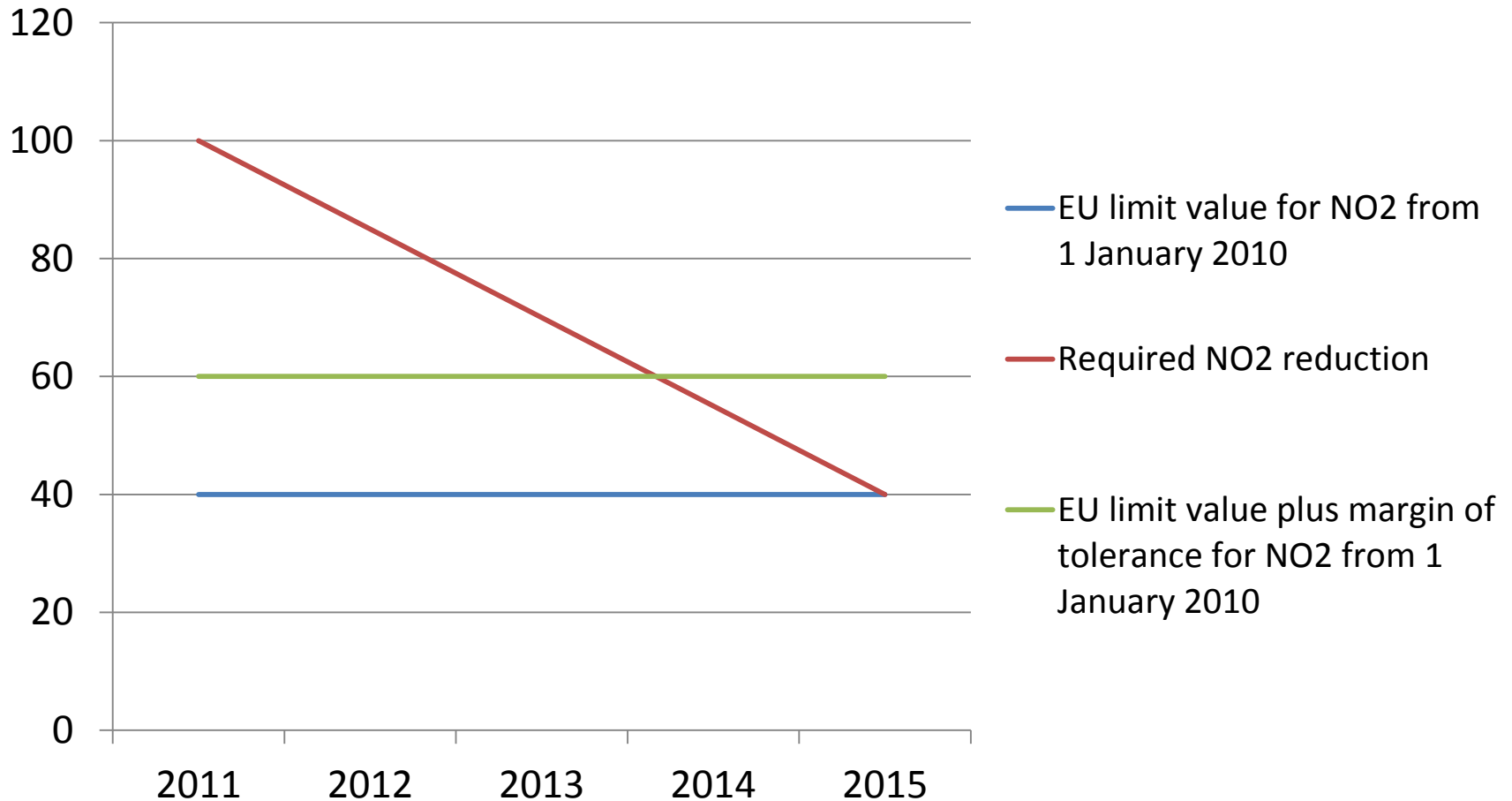
Roads carrying over 100,000 vehicles per day



EU legal standards compared to WHO guidelines

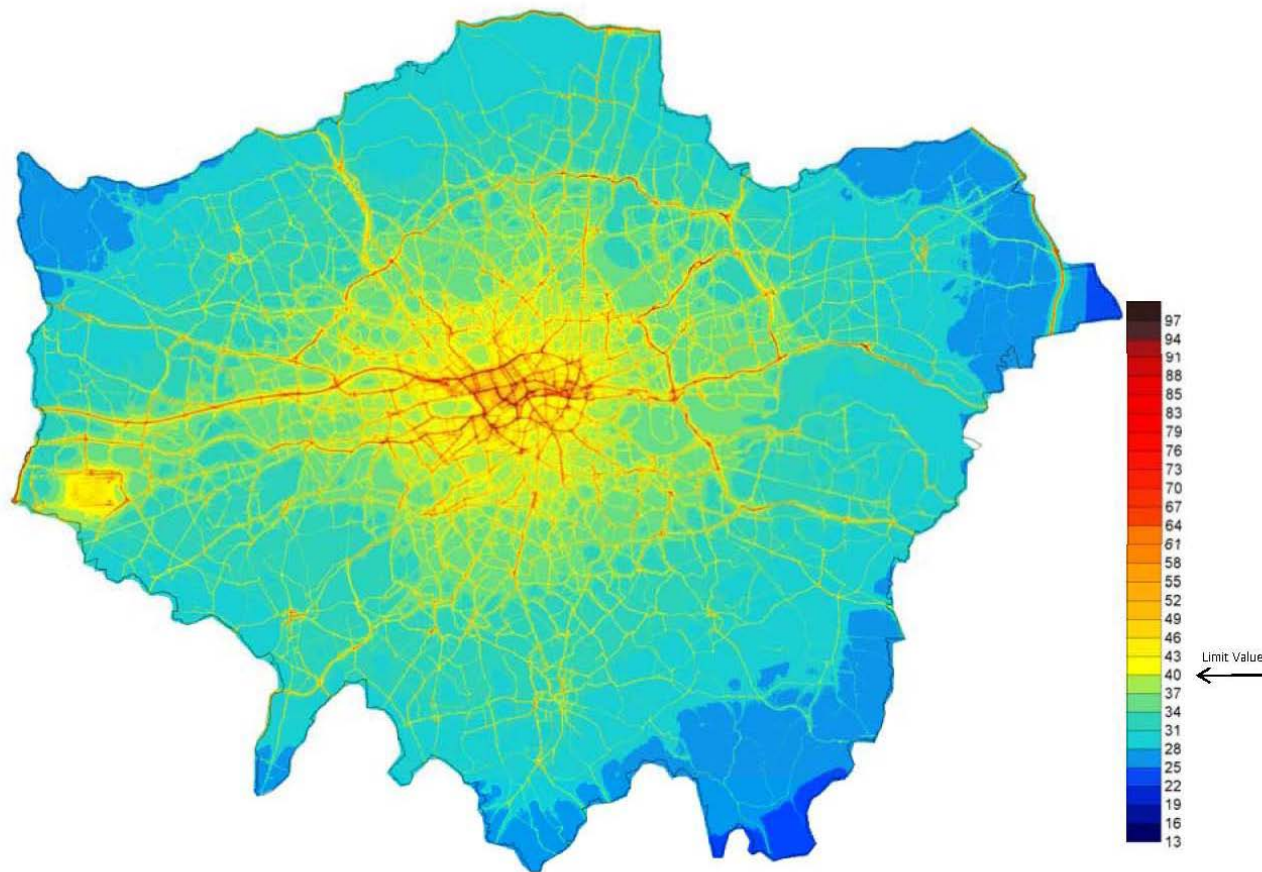
Pollutant	Legal standard		WHO guideline	
	Short term	Annual mean	Short term	Annual mean
Fine particulate matter (PM _{2.5})	<ol style="list-style-type: none"> 25 µg/m³ annual mean to become limit value in 2015 20 µg/m³ exposure concentration obligation based on 3-year average by 2015 Exposure reduction target in percentage by 2020 		25 µg/m ³ 24-hour mean	10 µg/m ³
Particulate matter (PM ₁₀)	35 days over 50 µg/m ³ since 2011	40 µg/m ³ since 2011	50 µg/m ³ 24-hour mean	20 µg/m ³
Nitrogen dioxide (NO ₂)	18 hours over 200 µg/m ³ since 2010	40 µg/m ³ since 2010	200 µg/m ³	40 µg/m ³

Concentrations of nitrogen dioxide (NO₂) in micrograms per cubic metre (µg/m³)



Concentration and trends – Mayor's Air Quality Strategy

NO₂ annual mean concentrations for 2008



Widespread breaches of nitrogen dioxide laws

Current status of infringement action

CLEAN AIR IN LONDON

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Zone code	EC code	Zone name	Population exposed to >40 ug/m ³ NO ₂ (annual average) in zone (# available)	Compliance expected by?	Compliance by 2015 with Low Emission Zone scenario?	Main cities or counties in zone	Time extension requested	Time extension granted
UK(GIB)		Gibraltar				Gibraltar		Annual
UK0001		Greater London Urban Area	698543	2025	No	London		
UK0002		West Midlands Urban Area	122366	2020	No	Birmingham, Wolverhampton, Dudley, Walsall, West Bromwich, Solihull, Stourbridge, Halesowen		
UK0003		Greater Manchester Urban Area	11070	2020	No	Manchester		
UK0004		West Yorkshire Urban Area	3812	2020	No	Leeds, Bradford, Huddersfield, Wakefield		
UK0005	1	Tyneside	71	2015	Yes	Newcastle, Gateshead	Annual	
UK0006	2	Liverpool Urban Area	1695	2015	Yes	Liverpool	Annual	
UK0007	3	Sheffield Urban Area	2950	2015	Yes	Sheffield	Annual	
UK0008	4	Nottingham Urban Area	Not available	2015	n/a	Nottingham	Annual	
UK0009	5	Bristol Urban Area	Not available	2015	Yes	Bristol	Annual	
UK0010	6	Brighton/Worthing/Littlehampton	Not available	2015	n/a	Brighton and Hove	Annual	
UK0011	7	Leicester Urban Area	Not available	2015	n/a	Leicester	Annual	
UK0012	8	Portsmouth Urban Area	Not available	2015	n/a	Portsmouth	Annual	
UK0013		Teesside Urban Area	Not available	2020	No	Middlesbrough, Stockton-on-Tees, Redcar, Billingham		
UK0014		The Potteries	Not available	2020	No	Stoke-on-Trent, Newcastle-under-Lyme, Kidsgrove		
UK0015	9	Bournemouth Urban Area	Not available	2015	n/a	Bournemouth, Poole	Annual	Until 1 January 2013 (amended AQ plan required)
UK0016	10	Reading/Wokingham Urban Area	Not available	2015	n/a	Reading, Wokingham	Annual	Until 1 January 2013
UK0017	11	Coventry/Bedworth	Not available	2015	n/a	Coventry, Bedworth	Annual	Until 1 January 2014 (amended AQ plan required)
UK0018		Kingston upon Hull	2687	2020	No	Kingston upon Hull		
UK0019		Southampton Urban Area	26052	2020	No	Southampton		
UK0020	12	Birkenhead Urban Area	Not available	2015	n/a	Birkenhead	Annual	
UK0021	13	Southend Urban Area	Not available	2015	n/a	Southend	Annual	
UK0022		Blackpool Urban Area	Not available	Compliant	n/a	Blackpool		n/a
UK0023	14	Preston Urban Area	Not available	2015	n/a	Preston		
UK0024		Glasgow Urban Area	Not available	2020	No	Glasgow		
UK0025	15	Edinburgh Urban Area	Not available	2015	n/a	Edinburgh	Annual	
UK0026	16	Cardiff Urban Area	Not available	2015	n/a	Cardiff	Annual	
UK0027	17	Swansea Urban Area	Not available	2015	n/a	Swansea	Annual	
UK0028	18	Belfast Metropolitan Urban Area	Not available	2015	n/a	Belfast	Annual	
UK0029		Eastern	3131	2020	No	Essex, Hertfordshire, Bedfordshire, Cambridgeshire, Norfolk and Suffolk		
UK0030	19	South West	3700	2015	n/a	Gloucestershire, Somerset, Dorset, Wiltshire, Devon, Cornwall	Annual	
UK0031		South East	9570	2020	No	Berkshire, Buckinghamshire, East Sussex, Hampshire, Isle of Wight, Kent, Oxfordshire, Surrey		
UK0032		East Midlands	17033	2020	No	Nottinghamshire, Derbyshire, Leicestershire, Rutland, Northamptonshire		
UK0033		North West & Merseyside	5698	2020	No	Cumbria, Lancashire, Greater Manchester, Merseyside, and Cheshire		
UK0034		Yorkshire & Humberside	3609	2020	No	Yorkshire, Humberside		
UK0035		West Midlands	11135	2020	No	Shropshire, Herefordshire, Staffordshire, Warwickshire and Worcestershire		
UK0036		North East	1414	2020	No	Northumberland, County Durham and Tyne and Wear		
UK0037	20	Central Scotland	Not available	2015	n/a	Falkirk	Annual	
UK0038	21	North East Scotland	181	2015	n/a	Perth, Aberdeen	Annual and hourly	Amended with hourly
UK0039		Highland	Not available	Compliant	n/a	Fort William	n/a	
UK0040		Scottish Borders	Not available	Compliant	n/a	Dumfries	n/a	
UK0041	22	South Wales	749	2020	No	Port Talbot, Newport	Annual*	
UK0042	23	North Wales	Not available	2015	n/a	Newtown	Annual	
UK0043	24	Northern Ireland	Not available	2015	n/a	Derby, Ballader	Annual	Until 1 January 2010 (amended AQ plan required)

Notes

1. In non-compliant air quality assessment zones at least part of the zone does not comply with the NO₂ annual mean limit value
2. Data on population exposure from 2010 Defra report to the European Commission (http://cdr.isonet.europa.eu/gb/eu/annualair/envtomkwa/1_ukquestionnaire_v6_2010_20120417.xlsx)
3. Compliance forecasts produced by Defra (<http://www.defra.gov.uk/consult/files/draft-overview-toc.pdf>)
4. n/a refers to the fact that the LEZ scenario has not been applied in the zone

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Sources of air pollution in London

Mayor's Air Quality Strategy 2010

- Emissions (not concentrations). Based on 2008 estimates
- PM₁₀ (Central London)
 - Road transport 79%. Cars 23%; taxis 20%; LGVs 10%. Buses <10%
 - Tyre and brake wear 35%
- PM_{2.5} (Greater London)
 - Road transport 80%; industrial and commercial gas combustion
 - LGV, cars and taxis 20% each. Buses 5%
 - Tyre and brake wear 25%
- Oxides of nitrogen
 - Road transport 46%; domestic gas 22%
 - Commercial gas, industry, airport and rail 7-8%
 - Cars 35%; HGVs 30%; buses 21%
- DfT 2009: Diesel versus petrol cars (g/mile): 21.7x PM₁₀; 2.1x NO_x

Solutions

Clean Air in London's 'manifesto' proposes 45 measures

Protect yourself (i.e. adapt) and reduce pollution for yourself and others (i.e. mitigate)

- Political leadership
- Massive campaign to build public understanding
- Clean up transport
- Build low emission cities including buildings
- Technology and behavioural change
- Protect the most vulnerable

Expected increases in unlawful air pollution must be mitigated fully and limits not exceeded once attained. Also use environmental information laws

Boris' Pollution Suppressor

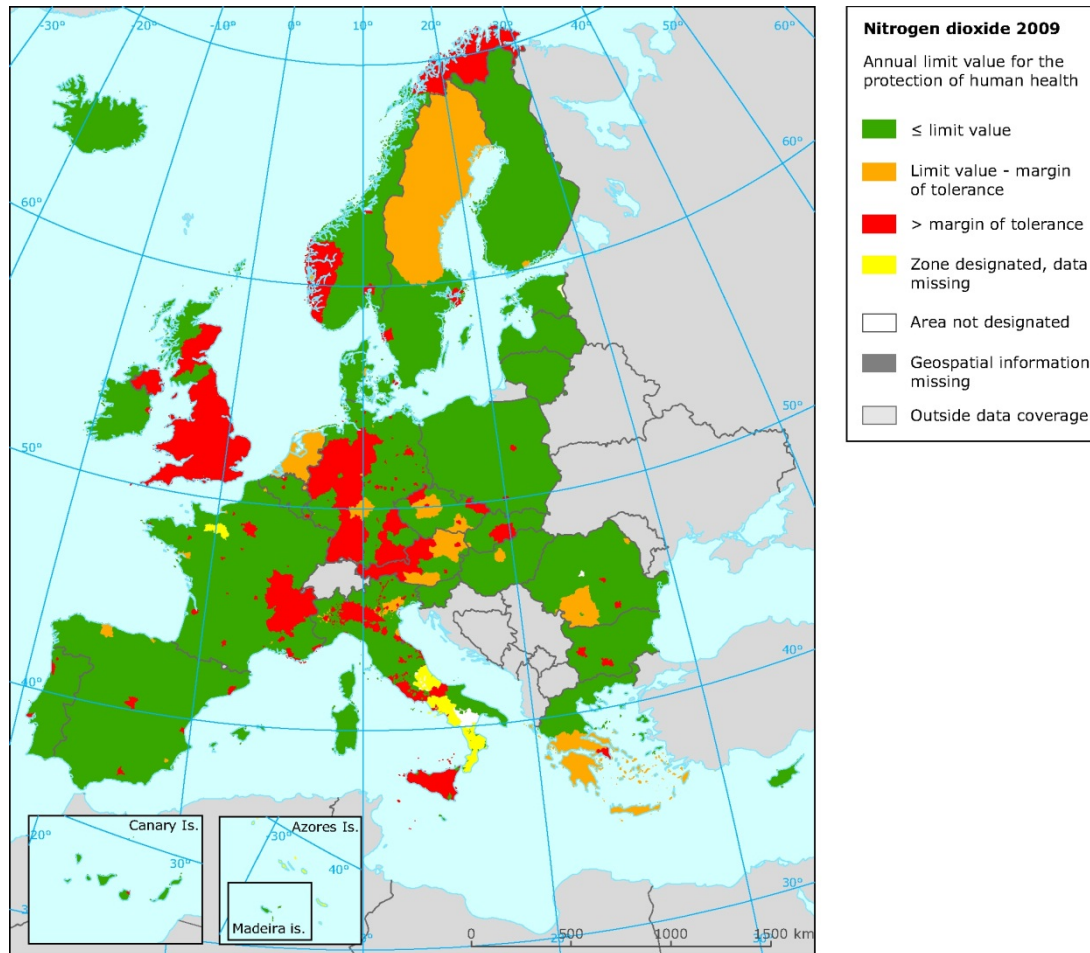
Reducing pollution by monitors used to report legal breaches



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Key issues: 'Year of Air' in 2013

UK has highest % age of zones exceeding LV+MOT



Key issues: 'Year of Air' in 2013

We need continuity and the tightening of health and legal protections

Defra, Red Tape Challenge, Environment Theme proposals (19 March 2012):

Working in partnership with other Member States, **we will also use** the European Commission review of air quality legislation, expected in 2013, to seek:

- Amendments to the Air Quality Directive which **reduce the infraction risk** faced by most Member States, especially in relation to **nitrogen dioxide** provisions.
- Simplifications to the legal framework (e.g. through reducing requirements for Member States) to reduce costs and administrative burdens to local authorities and businesses whilst maintaining or improving health and ecosystem protection.
- Requirements that are strictly proportional to evidence on costs and benefits

'Clean Air in London' emphasis

Public health outcomes framework for 2013-2016

Health and Wellbeing Boards

- Metrics for Health and Wellbeing Boards from 2013 include Domain 3: Health protection; 3.1 Air pollution:

“The mortality effect of anthropogenic particulate air pollution (measured as fine particulate matter, PM_{2.5}) per 100,000 population”

- Mortality Burden: To be expressed as attributable deaths; attributable fractions; and associated years of life lost to the whole population

Attributable deaths by London borough in 2008

Inner London has highest pollution. Outer London shows more early deaths as borough size is bigger (incl. non-anthropogenic)

Note: Provisional calculations prepared by Campaign for Clean Air in London (30 June 2010 as at 12 noon)

Boroughs ranked by average concentration of PM2.5

	Tot pop	PM2.5	6%
City of London	9,155	17.590	4
Westminster	214,750	16.561	96
Camden	207,198	16.188	107
Kensington and Chelsea	169,015	16.169	75
Tower Hamlets	231,664	16.024	102
Islington	195,114	15.921	100
Waltham Forest	226,706	15.920	129
Southwark	276,838	15.804	136
Hammersmith and Fulham	178,656	15.794	86
Hackney	223,357	15.702	96
Lambeth	291,783	15.696	139
Wandsworth	289,091	15.564	148
Newham	261,691	15.423	121
Enfield	291,256	15.410	178
Ealing	317,721	15.405	167
Brent	277,863	15.402	133
Haringey	235,055	15.321	99
Lewisham	269,020	15.300	153
Hounslow	229,905	15.258	121
Greenwich	236,450	15.244	150
Merton	198,068	15.192	107
Redbridge	252,553	15.114	153
Barnet	328,752	15.112	201
Richmond upon Thames	184,519	15.048	97
Barking and Dagenham	172,357	15.036	120
Kingston upon Thames	154,205	15.015	91
Croydon	341,021	14.953	205
Sutton	185,180	14.940	124
Hillingdon	253,432	14.898	154
Bexley	218,945	14.842	161
Harrow	218,956	14.819	119
Bromley	302,464	14.725	217
Havering	230,479	14.621	182
Greater London (per CCAL)	7,673,219		4,271
Greater London (per Mayor)	7,673,217		4,267

Boroughs ranked by total estimated premature deaths

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'The London Matrix': Clean air urgently and sustainably in all large cities

	Air quality	Climate change
London (or any city)	2012	
Rest of world		

10 steps for 'Clean Air in Cities'

1. Investigate
2. Protect yourself (i.e. adaptation)
3. Reduce pollution for yourself and others (i.e. mitigation)
4. Research
5. Lobby
6. Campaign
7. Oppose unlawful developments and situations
8. Spread the word
9. Support Friends of the Earth and 'Clean Air in London'
10. Feedback your ideas

We need to protect public health and encourage sustainable development

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