



Low emission zones and people's health

HEAL Poland

By Simon Birkett

Founder and Director




Clean Air in London

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14 April 2023

Disclaimer: Please check tfl.gov.uk for details

Clean Air in London's mission

	Air pollution	Greenhouse gases
London or any city	Air pollution, cities, health and justice	
Rest of world		

Overview

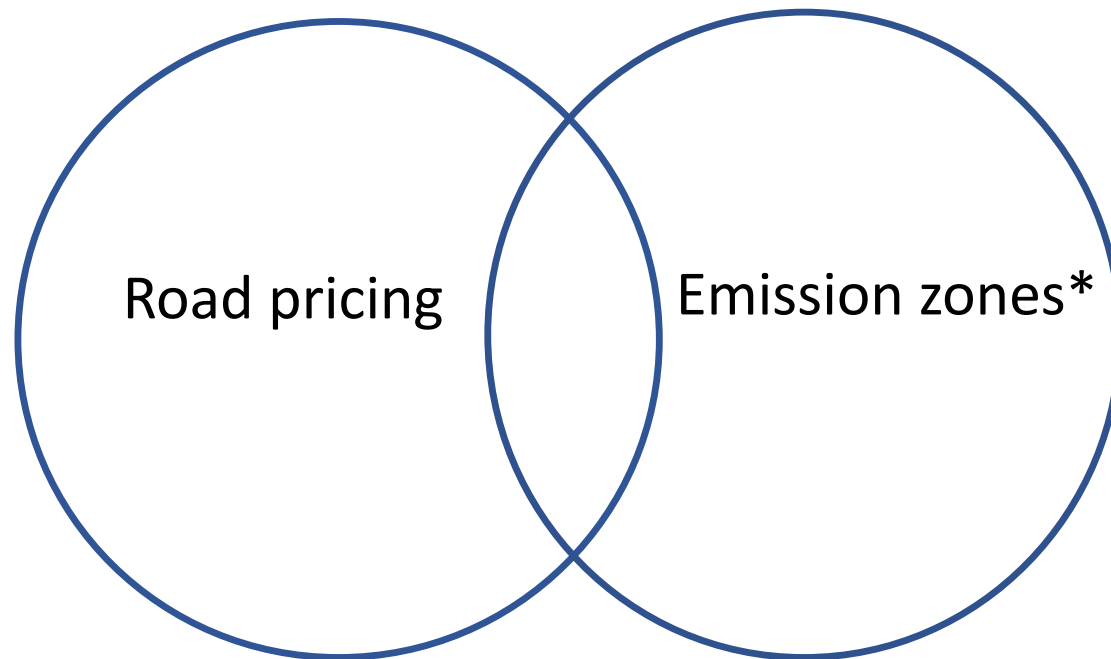
- Mission to achieve full compliance with WHO air quality guidelines asap throughout London and elsewhere. AQGs updated in Sept 2021
- Clean Air in London (“CAL”) has called for Berlin-style low emission zones in London since before April 2009. Daily charges, ‘points’ and local enforcement
- Diesel was classified as carcinogenic to humans in June 2012
- CAL has called for diesel to be banned in London for over 10 years
- CAL has called for Emission Based Road Charging since 15 June 2015
- We need political leadership, technology and lifestyle changes

What are 'lifestyle change' policies?

1. Bans
2. Charges
3. Public understanding campaigns
4. Incentives
5. Adoption

The London Circles

Transport measures address congestion and/or emissions



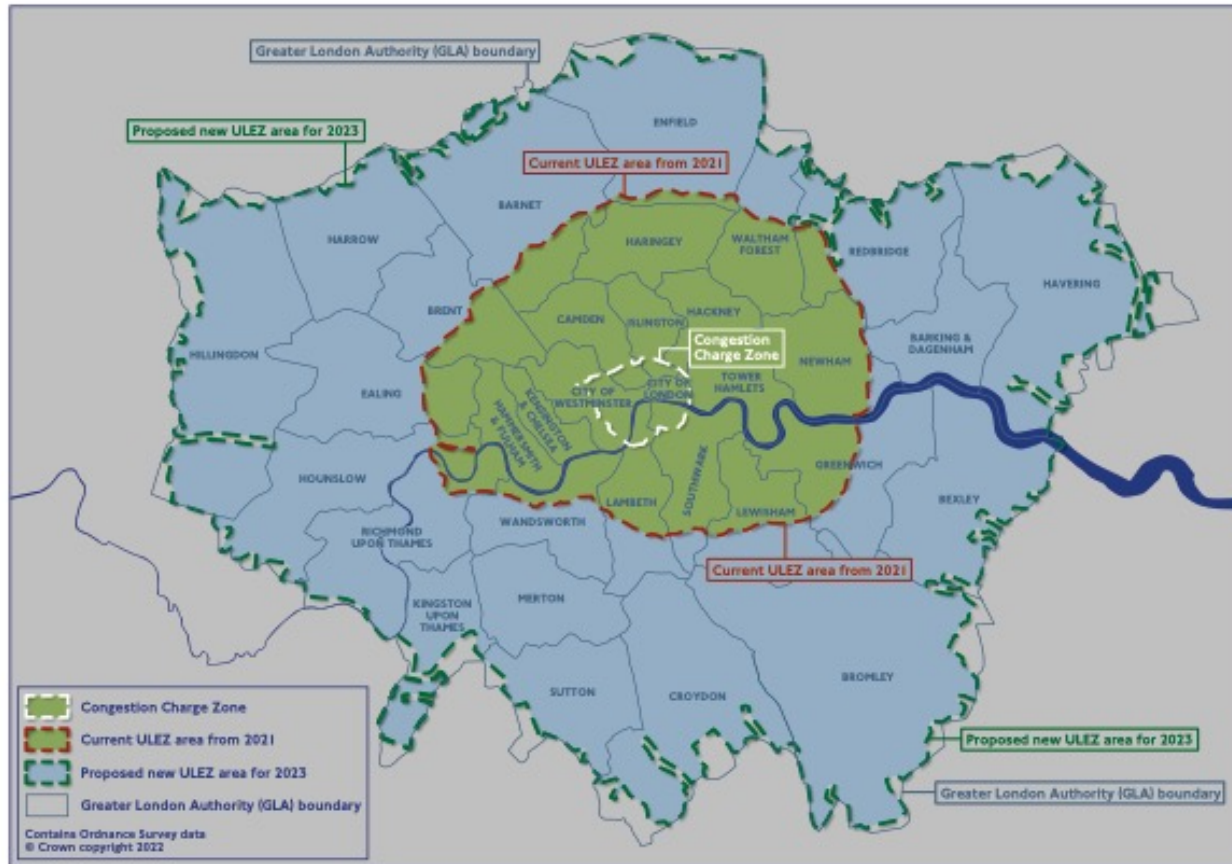
* Clean Air Zones

Congestion and emission measures

'Bans' vs daily charges enforced by automatic number plate recognition

- Congestion charging (CCZ) (since 17 February 2003): £15 daily charge to enter Central London (7am-6pm weekdays and 12pm-6pm Saturday and Sunday)*
 - Low emission zones (LEZ) (since 4 February 2008): £250, £500 or £1,000 ('penalties')(24/7/365)*
 - T-Charge: (25 October 2017 to 8 April 2019): £10 daily charge (7am-6pm)
 - Ultra low emission zones (ULEZ) (since April 2019) - £12.50 daily charge to enter central and inner London (24/7/364)*
 - Emissions Based Road Charging could pay people to walk and cycle
- *Approximate. For details please see tfl.gov.uk. Income is 'hypothecated'*

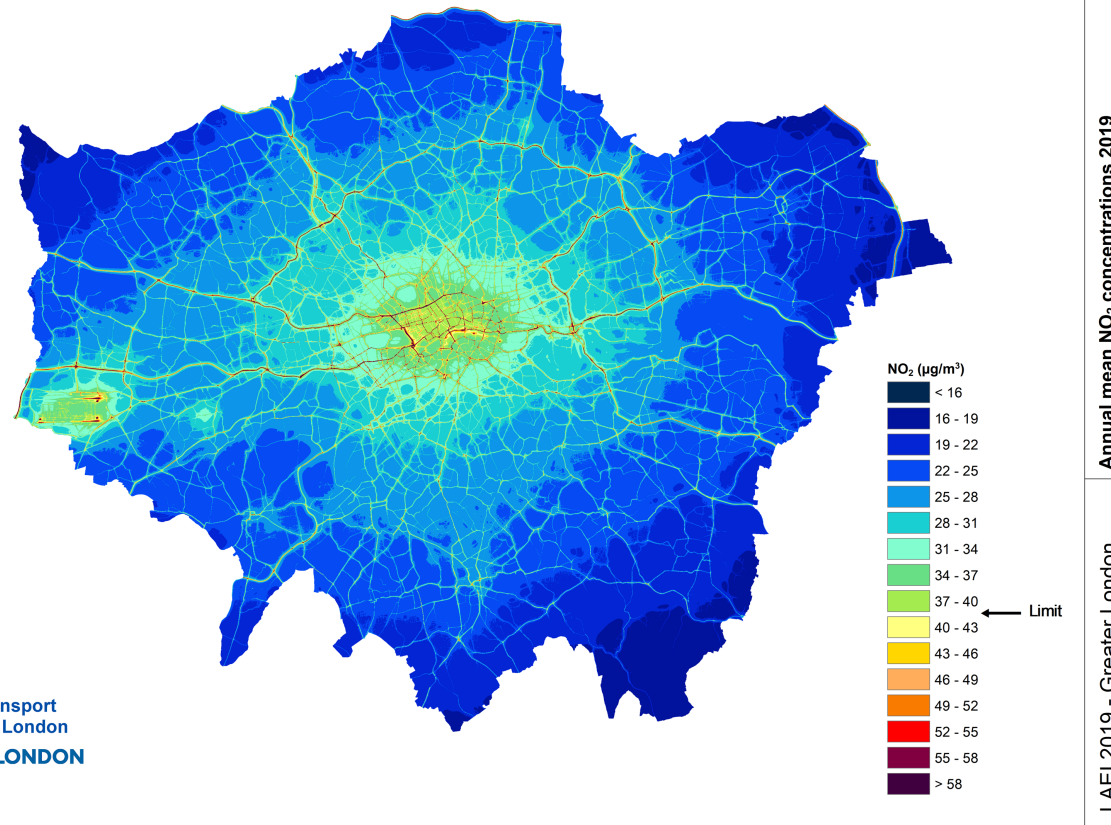
Central, inner and outer London



(c) Clean Air in London 2023

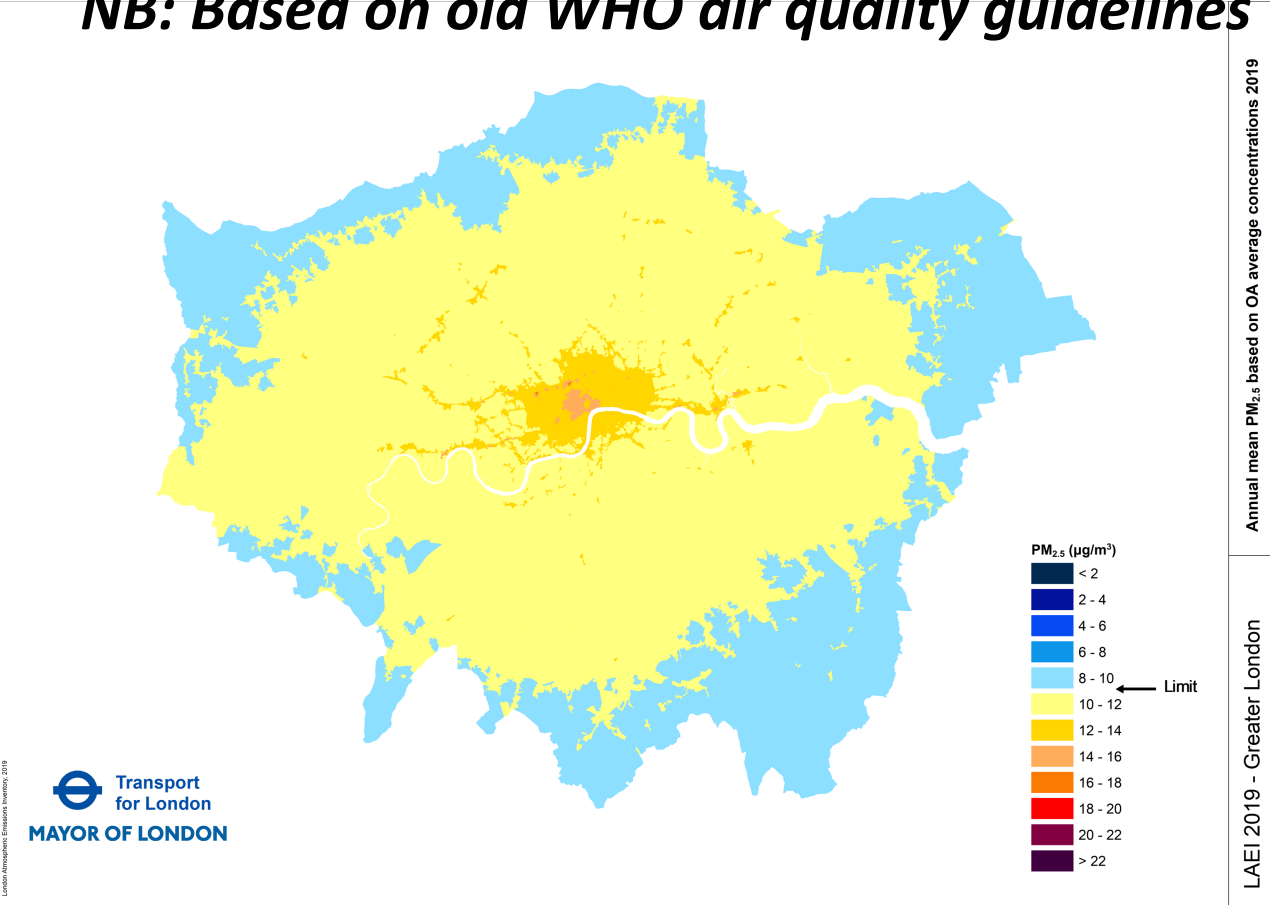
Annual mean concentrations of nitrogen dioxide (NO₂) in 2019

NB: Based on old WHO air quality guidelines



Annual mean concentrations of fine particulate matter (PM_{2.5}) in 2019

NB: Based on old WHO air quality guidelines



LEZ ('bans'): Euro III (PM), Euro IV (PM), Euro VI Diesel (NOx and PM)

	Central London	Inner London	Outer London
Buses	7 July 2008 (Euro III) (3.5-12 tonnes)	7 July 2008 (Euro III) (3.5-12 tonnes)	7 July 2008 (Euro III) (3.5-12 tonnes)
Coaches (£200)	7 July 2008 (Euro III) (3.5-12 tonnes)	7 July 2008 (Euro III) (3.5-12 tonnes)	7 July 2008 (Euro III) (3.5-12 tonnes)
Trucks (£200)	4 Feb 2008 (Euro III) (over 12 tonnes) 7 July 2008 (Euro III) (3.5-12 tonnes) 3 January 2012 (Euro IV) 1 March 2021 (Euro VI)	4 Feb 2008 (Euro III) (over 12 tonnes) 7 July 2008 (Euro III) (3.5-12 tonnes) 3 January 2012 (Euro IV) 1 March 2021 (Euro VI)	4 Feb 2008 (Euro III) (over 12 tonnes) 7 July 2008 (Euro III) (3.5-12 tonnes) 3 January 2012 (Euro IV) 1 March 2021 (Euro VI)
Taxis			
Minicabs			
Vans and minibuses (£100)	3 January 2012 (Euro 3)	3 January 2012 (Euro 3)	3 January 2012 (Euro 3)
Cars			
Motorcycles			

T-Charge – Euro 4/IV (NOx and PM)

	Central London	Inner London	Outer London
Buses	23 October 2017		
Coaches	23 October 2017		
Trucks	23 October 2017		
Taxis			
Minicabs			
Vans	23 October 2017		
Cars	23 October 2017		
Motorcycles			

ULEZ – Euro 4 petrol (NOx) and Euro 6/VI Diesel (NOx and PM) Taxis and PHVs must be zero emission capable (ZEC)

	Central London	Inner London	Outer London
Buses	8 April 2019	1 March 2021	1 March 2021
Coaches	8 April 2019	1 March 2021	1 March 2021
Trucks (over 3.5 tonnes)	8 April 2019	1 March 2021 (NOx/PM)	1 March 2021
Taxis	1 Jan 2018 (all new licences must be ZEC)	1 Jan 2018 (all new licences must be ZEC)	1 Jan 2018 (all new licences must be ZEC)
Minicabs	8 April 2019 1 Jan 2023 (new licences must be ZEC)	25 October 2021 1 Jan 2023 (all new licences must be ZEC)	1 Jan 2023 (all new licences must be ZEC)
Vans	8 April 2019	25 October 2021	29 August 2023
Cars	8 April 2019	25 October 2021	29 August 2023
Motorcycles	8 April 2019 (Euro 3 NOx)	25 October 2021 (Euro 3 NOx)	29 August 2023 (Euro 3 NOx)

UK cities with clean air zones (as at 14.4.23)

Minimum: Euro 6/VI diesel, Euro 4 (petrol) and Euro 3 (motorcycles)

	A: Buses and taxis	B: A + HGVs	C: A+B + vans/minibuses	D: A+B+C + cars (and motorcycles?)
Bath			Yes	
Birmingham				Yes
Bradford			Yes	
Bristol				Yes
Portsmouth		Yes		
Sheffield			Yes	
Tyneside			Yes	
Manchester	?	?	?	?

Diesel cars registered for the first time

	2017	2021	% reduction
East Midlands	77,229	17,427	77.4% - 8
East of England	99,974	16,714	83.3% - 3
London	56,282	7,595	86.5% - 2
North East	26,452	5,423	79.5% - 7
North West	84,509	25,114	70.3% - 9
South East	241,818	41,138	83.0% - 4
South West	116,255	20,248	82.6% - 6
West Midlands	146,542	16,744	88.6% - 1
Yorkshire and the Humber	87,689	15,146	82.7% - 5

Deaths attributable to PM_{2.5} (% deaths per 10 µg/m³)

	2018	2021	% reduction
East Midlands	6.7	5.6	16.4 – 6=
East of England	7.6	5.5	17.6 – 5
London	9.0	6.5	27.8 – 2
North East	5.2	4.8	7.7 – 9
North West	5.9	5.3	10.2 – 8
South East	7.7	5.4	29.9 – 1
South West	6.1	5.1	16.4 – 6=
West Midlands	6.8	5.5	19.1 – 3
Yorkshire and the Humber	6.1	5.0	18.0 – 4



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