

# MAYOR OF LONDON

## Air pollution challenges faced in London and measures taken to improve the air quality

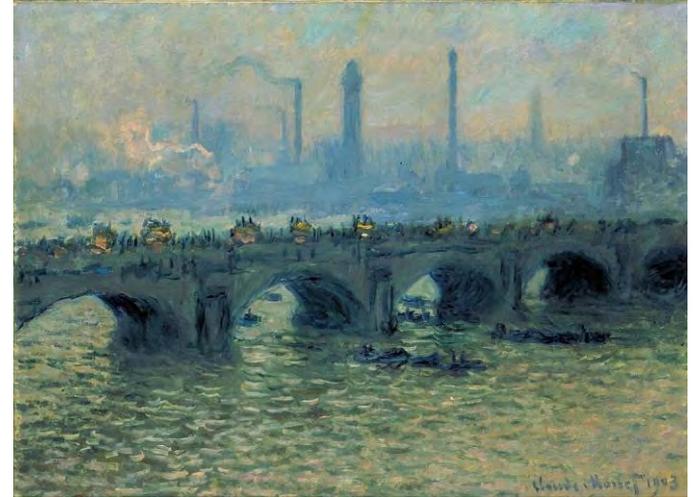
A photograph of the London skyline, featuring the City Hall (a large, curved, glass-clad building) in the foreground on the left, and other skyscrapers like the Gherkin and the Shard in the background. The sky is clear and blue.

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## The Great Smog – London in the 1950s

- During the 19<sup>th</sup> and early 20<sup>th</sup> centuries London grew rapidly, both in population and as an industrial centre.
- Coal was the main fuel used to power industry and to heat homes.
- As a result London used to be famous for its “smogs”, caused by very high levels of pollution.
- By 1952 the situation had got so bad that over 4,000 people died in the immediate aftermath of the “great smog”
- This led to the passing of the first “Clean Air Act” in 1956.



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## The Clean Air Act 1956

- The clean air act used ideas that are common in anti-pollution legislation today:
- Smoke control zones were introduced in the areas of worst pollution
- Within these zones controls were introduced on the fuels and furnaces they were burnt in.
- Local authorities could penalise people who didn't comply and provide funds to help people adapt to the new rules.
- As a result the move to the use of gas for heating and industry was greatly accelerated

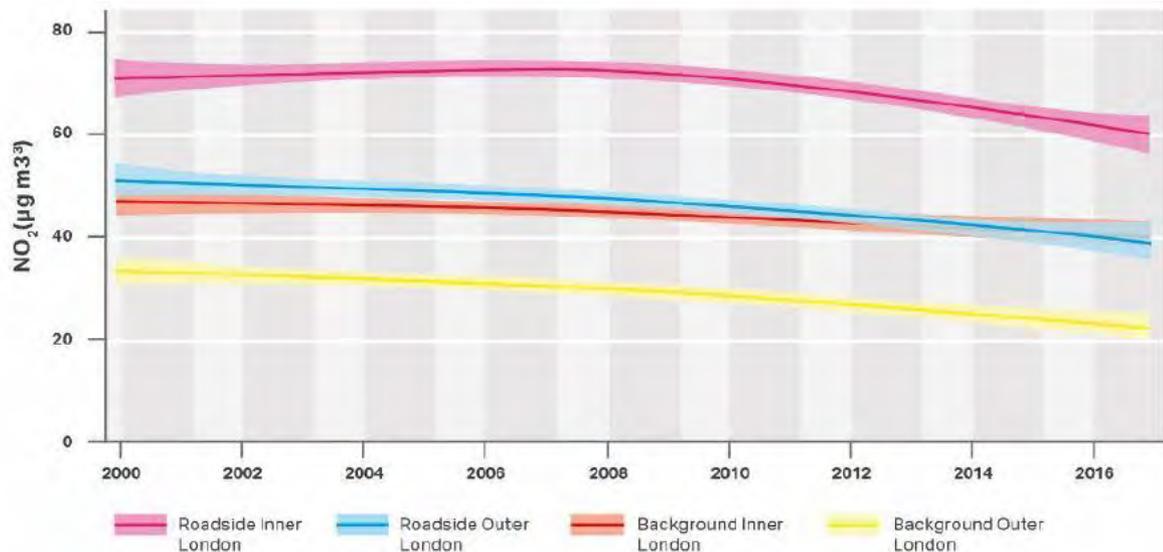
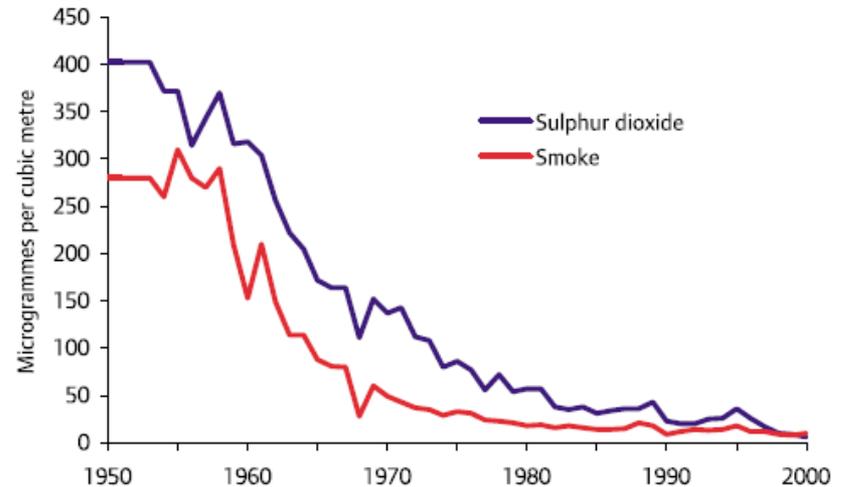


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## Historical improvements, but still work to do

The benefits of the Clean Air Act were rapid and long lasting

Smoke and Sulphur Dioxide concentrations remain low more than 50 years later, showing that well targeted action can work.

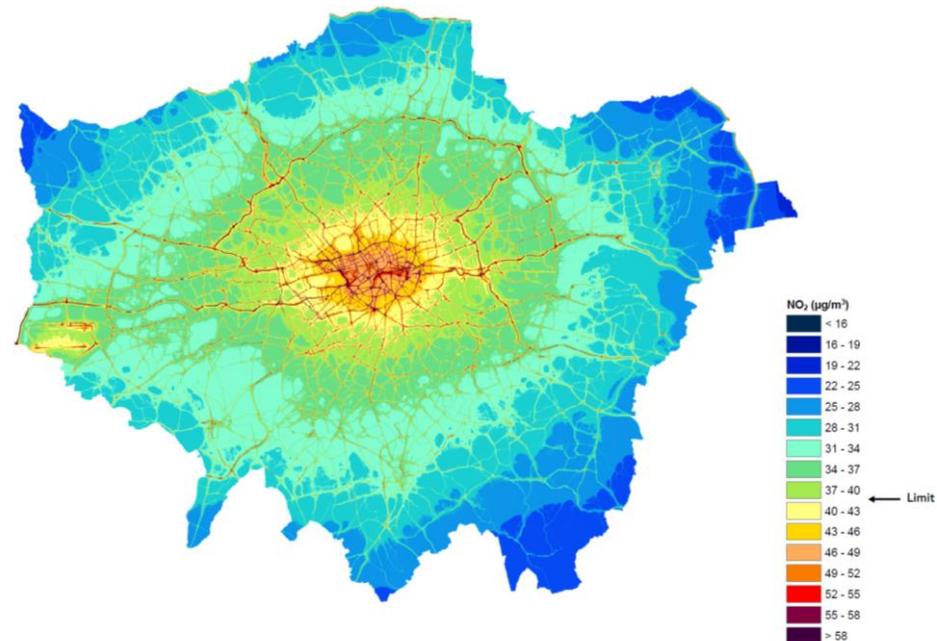


However concentrations of NO<sub>2</sub> and other pollutants have improved only slowly in recent years

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## Air Quality in London Today

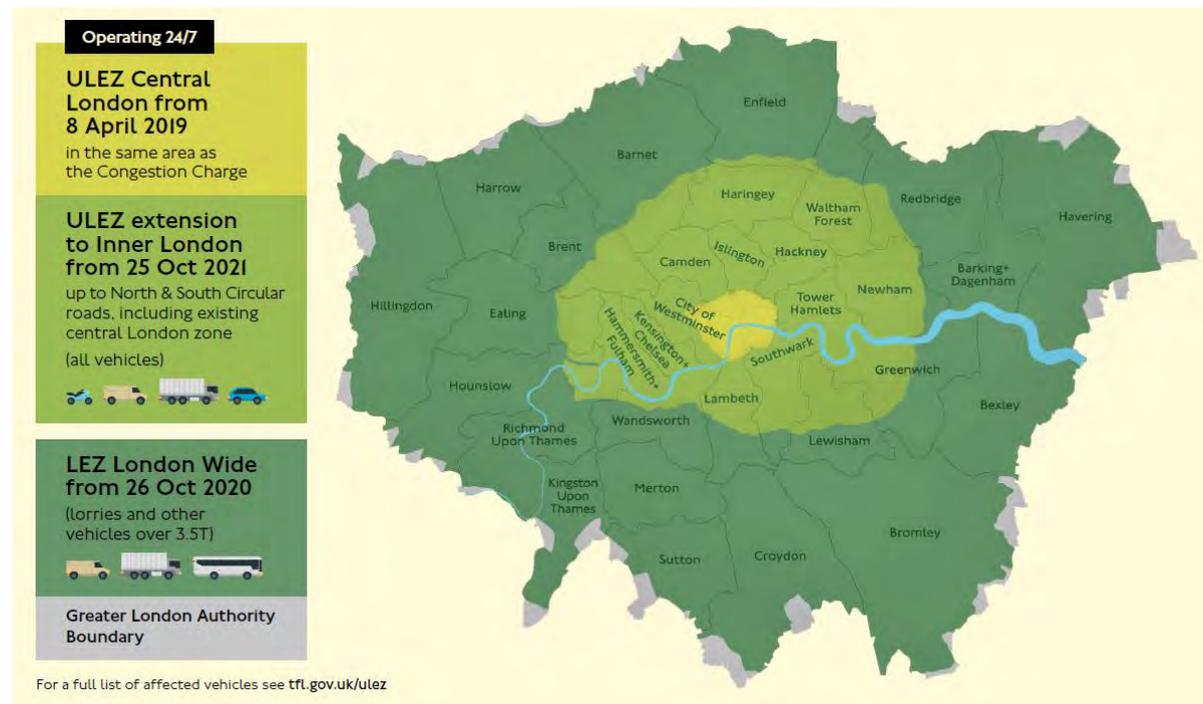
- The principle pollutants of concern in London today are  $\text{NO}_2$  and  $\text{PM}_{2.5}$
- The dominant source of these pollutants is road traffic.
- In 2016, 89-100% of major roads in inner and central London (and 36% in outer London) exceeding  $\text{NO}_2$  limit values
- People living in the capital's most deprived areas are, on average, exposed to about a quarter more  $\text{NO}_2$  pollution



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## Improving air quality today – the ULEZ

- The Ultra-low emission zone is a targeted intervention to reduce emissions from road transport.
- Vehicles travelling within the zones must meet a minimum emissions standards or pay a daily charge.
- To help people comply we have created scrappage funds for older vehicles and improved public and sustainable transport provision



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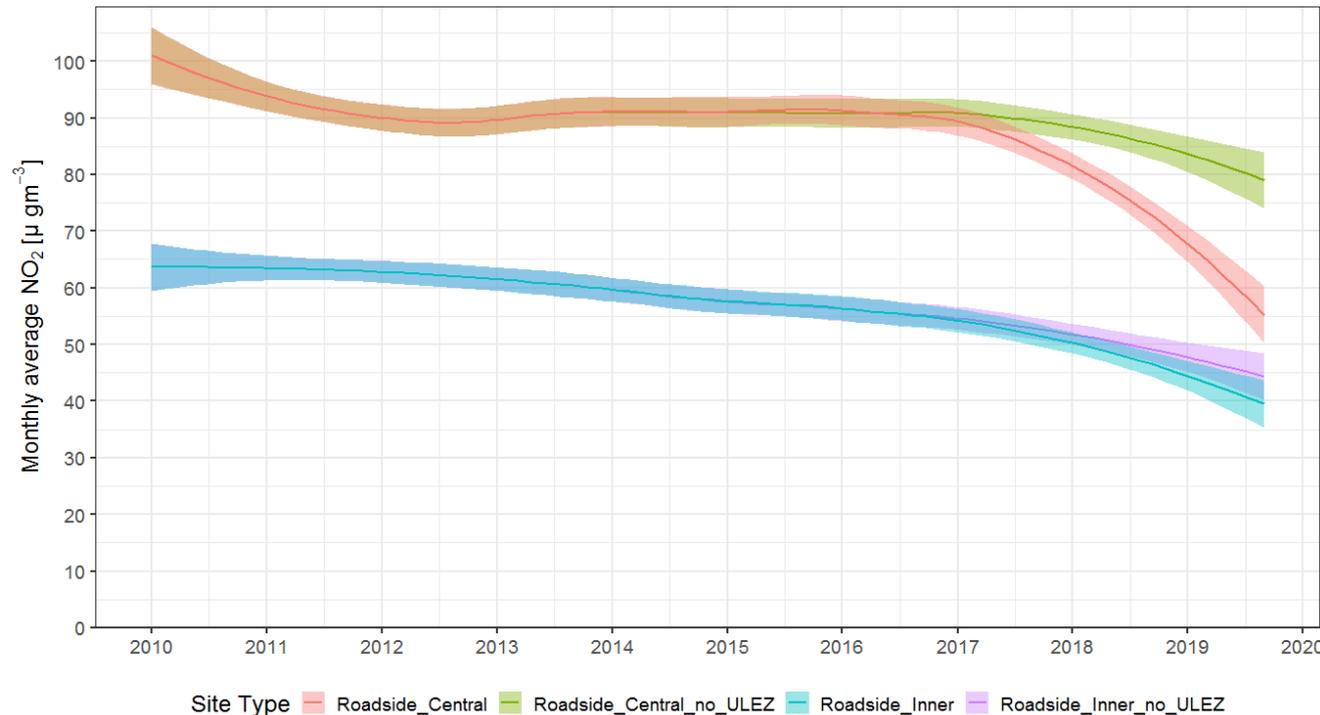
## ULEZ: THE RESULTS

**The ULEZ started in Central London 8 April 2019**

Data from its first six months of operation reveal:

- 77% vehicles in the zone now meet ULEZ standards
- Roadside (NO<sub>2</sub>) pollution reduced by ~1/3 from Feb 2017 to Sep 2019
- NO<sub>x</sub> emissions from road transport in the central zone are now 31% lower than if scheme not in place

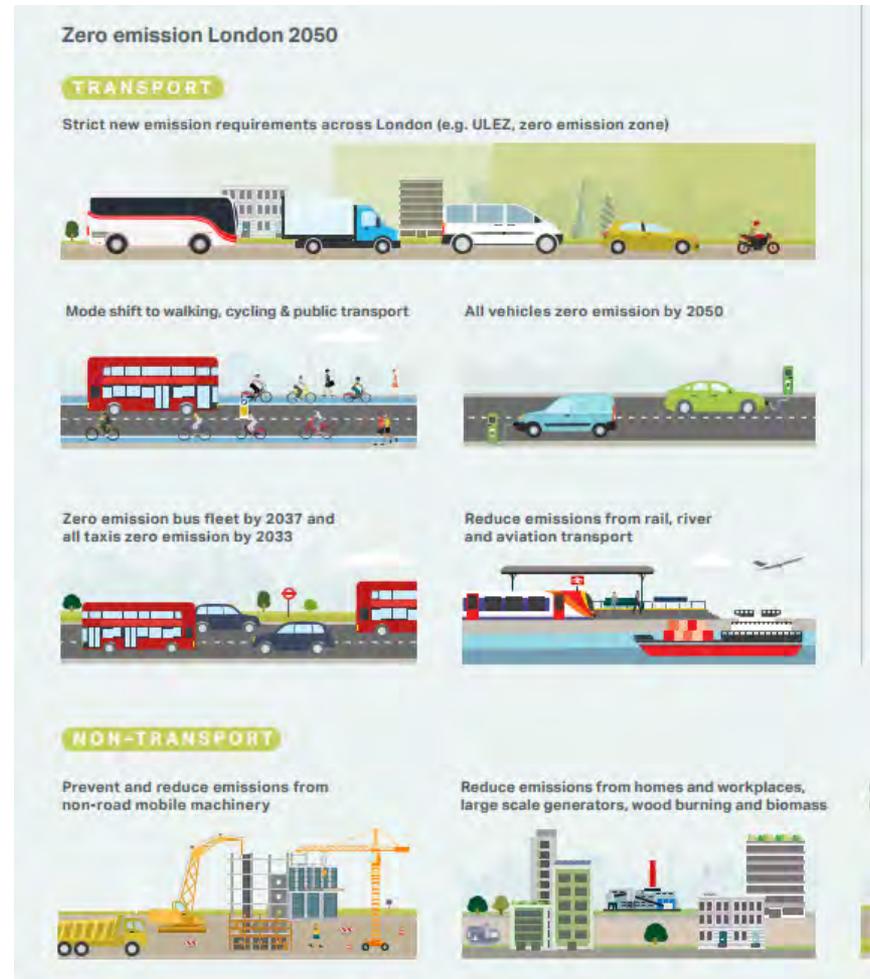
Trends in NO<sub>2</sub> in London vs. no ULEZ scenario



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## Beyond the ULEZ – a broad approach

- Historical success, such as the Clean Air Act, and the ULEZ will get us into compliance with legal limits.
- But we want to go further and get London's air quality as good as it can be.
- To do this we are tackling all of the major sources of pollution.
- We are also working increasingly to align air quality and climate change goals.



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