NO$_2$ CHALLENGE (2013)
PARTICULATE MATTER

• 7.9 million Londoners live in areas exceeding World Health Organization air quality guidelines by at least 50 per cent.

• In central London the average annual levels of PM2.5 are almost double the WHO guideline limits.
HEALTH AND EQUALITIES
**NO\textsubscript{x} EMISSIONS (2013)**

- **Road transport** 50%
  - **Aviation** 8%
  - **Gas - Domestic** 12%
  - **Industry** 7%
  - **Non Road Mobile Machinery** 7%
  - **Gas - Non-Domestic** 8%
  - **Domestic and Commercial other Fuels** 3%
  - **Rail** 3%
  - **River** 1%

- **Resuspension** <1%

- **Other** 1%

- **Taxi** 2%
- **TfL Bus** 10%
- **Petrol Car** 12%
- **Motorcycle** <1%
- **HGV** 11%
- **Non-TfL Bus and Coach** 3%
- **Van and Minibus** 6%
- **Road transport** 50%
CONGESTION CHARGE

- Feb 2003
- Monday – Friday, 7am – 6pm
- £11.50 on the day of travel
- £14 on the charging day after travel
- £10.50 for customers on CC Auto Pay
- Daily, weekly, monthly or annual payment for individual vehicle registration number
- £10 charge during Congestion Charge hours for older polluting vehicles
- On top of existing £11.50 Congestion Charge
- For pre-Euro 4/VI (petrol & diesel) – toughest standard of any world city.
What is the Central London ULEZ?

1. Central London ULEZ starts 8 April 2019

2. It will operate in the existing central London Congestion Charge Zone

3. It will operate 24 hours a day, every day of the year

4a. Vehicles must meet strict emission standards to drive in the ULEZ area......
   • Euro 4 for petrol cars and vans (more than 14 years old in 2019)
   • Euro 6 for diesel cars and vans (more than four years old in 2019)
   • Euro 3 for motorcycles etc
   • Euro VI for lorries, buses and coaches

4b. Or pay a charge
   • £12.50 per day for cars, motorcycles and vans
   • £100 per day for lorries, buses/coaches

5. It replaces the T-Charge in central London*, and is in addition to the Congestion Charge

*There are some exemptions and a grace period for residents
Where and when does it operate?

**ULEZ Central London**
- From 8 April 2019
- In the same area as the Congestion Charge

**ULEZ extension to Inner London**
- From 25 Oct 2021
- Up to North & South Circular roads, including existing central London zone (all vehicles)

**LEZ London Wide**
- From 26 Oct 2020
- For lorries and other vehicles over 3.5T

For a full list of affected vehicles see TFL.gov.uk/ulez
• £23 million scheme to help London’s microbusinesses & charities **scrap** older, polluting vans and minibuses.
• £25 million scheme to help low-income Londoners.
• TfL are working with industry to develop **retrofit** solutions for commercial operators:
  – taxis, 3.5t vans; buses; coaches; refuse and other specialist vehicles.
• We continue to call on government to fund a targeted **scrapage scheme** to mitigate business costs.
New double decks will be hybrid, hydrogen or electric from 2018; new single decks will be zero exhaust emission from 2020

Target: Zero emission bus fleet by 2037 at the latest
The first LEBZ along Putney High Street has reduced the number of hours breaching legal limits by more than 90 per cent (vs 2016).
No more diesel taxis from 2018 and new taxis will need to be zero emission capable.

Target: Zero emission capable taxi fleet by 2033 at the latest.
A variety of different infrastructure solutions are needed to support the uptake of EVs:

- **On-street residential charging**: 7-8 hours
- **Top-up/destination charging**: 3-4 hours
- **Rapid charging**: 20-30 mins

Currently around 2,200 rapid chargers ~23% of UK total
LONDON’S CHALLENGES

• Charging and installing points is challenging:
  – Around 2/3 of households have no off-street parking – affects utilisation assumptions and type of infrastructure we need;
  – London's roads are managed by TfL, Highways England and 33 local authorities – different priorities and approaches to planning;
  – Land is valuable and in high demand – competing demand for sites, especially where most needed.

• BUT we are one of 25 EV capitals, together home to around half of all electric vehicles in the world.
our goals

By 2025:
• An expected 45 per cent reduction in NOx emissions and a 48 per cent reduction in PM2.5 exhaust emissions in the area
• No primary or secondary schools in areas that exceed legal air quality limits
• Only 2% of road kms in London expected to exceed NO2 limit values
• Gap in air quality between high and low income areas of London reduced by 71%.

By 2041:
• 80% of trips to be on foot, by cycle or public transport (from 64%);
• 10-15% traffic reduction;