# Going Low, Ultra Low (and Zero Emission..?)

Jo Boyd-Wallis, Transport for London

Carbon Neutral Cities Alliance Workshop, January 2016

TRANSPORT FOR LONDON
EVERY JOURNEY MATTERS

# Reducing harmful emissions: Mayoral targets

- 60% reduction in $CO_2$ over 1990 baseline (equating to c.47% reduction in transport emissions)

- Compliance with legal Limits for Nitrogen Dioxide ($NO_2$)

- Further drive down particulate matter ($PM_{10}$ and $PM_{2.5}$)

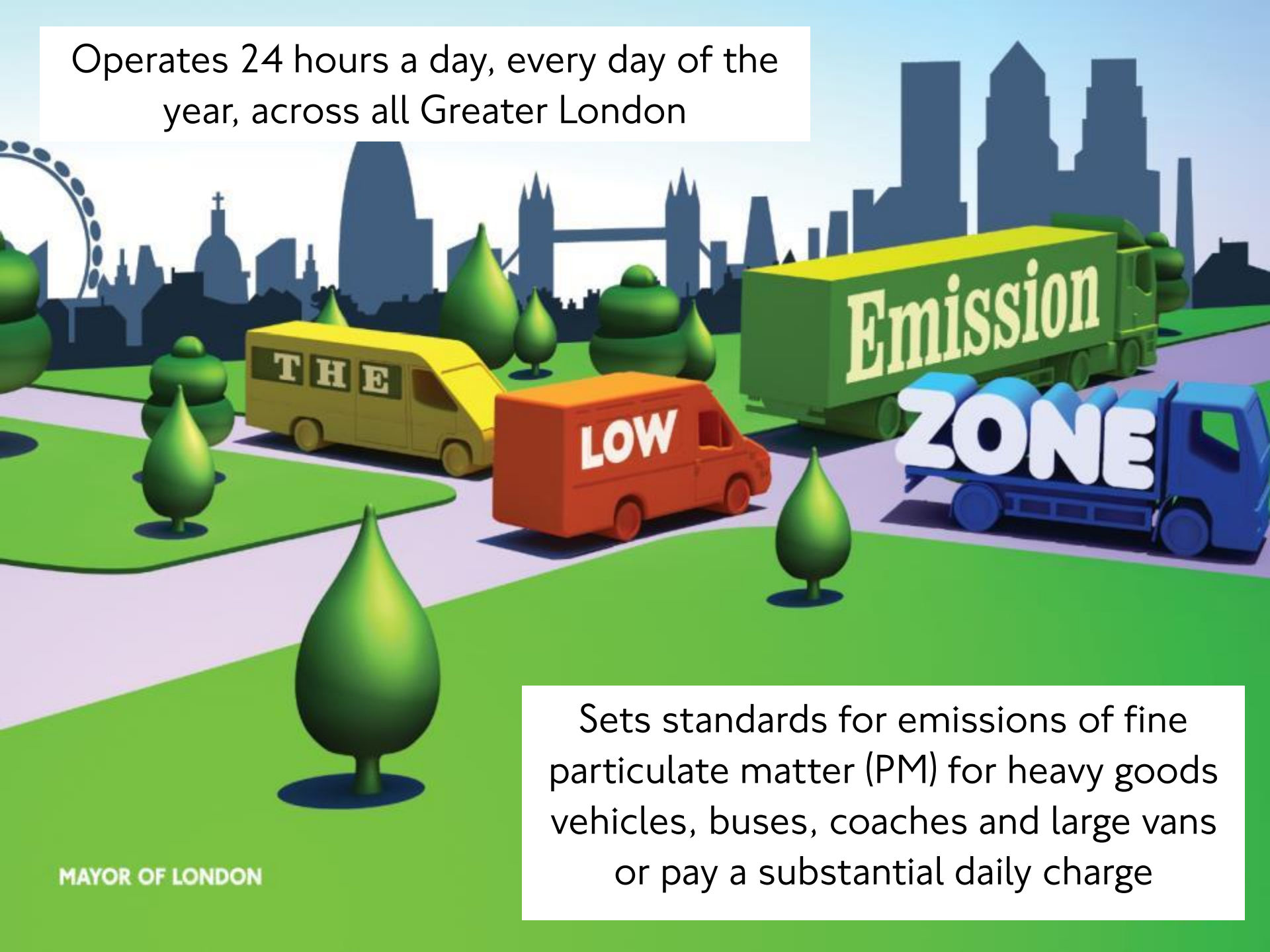
London Evening Standard

MPs CONDEMN FAILURE TO TACKLE DEADLY POLLUTION BLACKSPOTS

LONDON'S INVISIBLE KILLER ... THE AIR WE BREATHE

OW-ZAT! WHO NEARLY BOWLED KATE OVER?

Operates 24 hours a day, every day of the year, across all Greater London

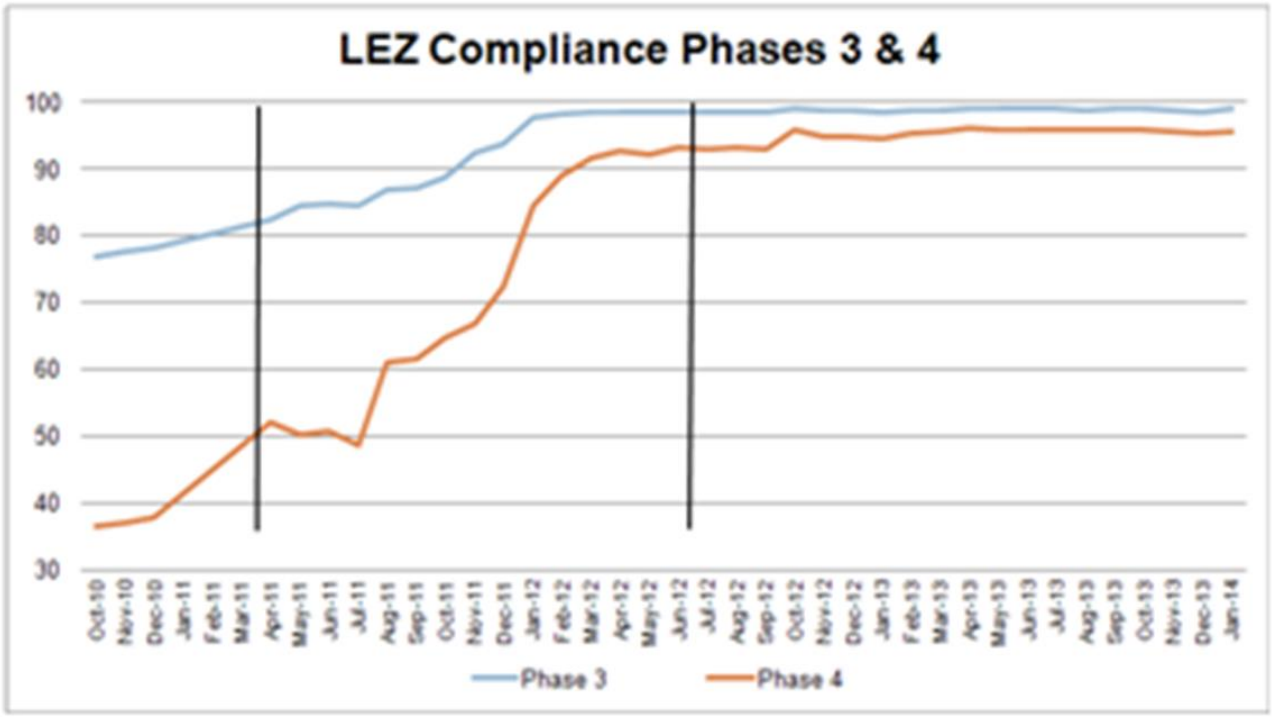



Sets standards for emissions of fine particulate matter (PM) for heavy goods vehicles, buses, coaches and large vans or pay a substantial daily charge

# LEZ Compliance

- High charge designed to act as a strong deterrent as TfL would prefer vehicle operators to meet the standards rather than pay a daily charge or risk a fine

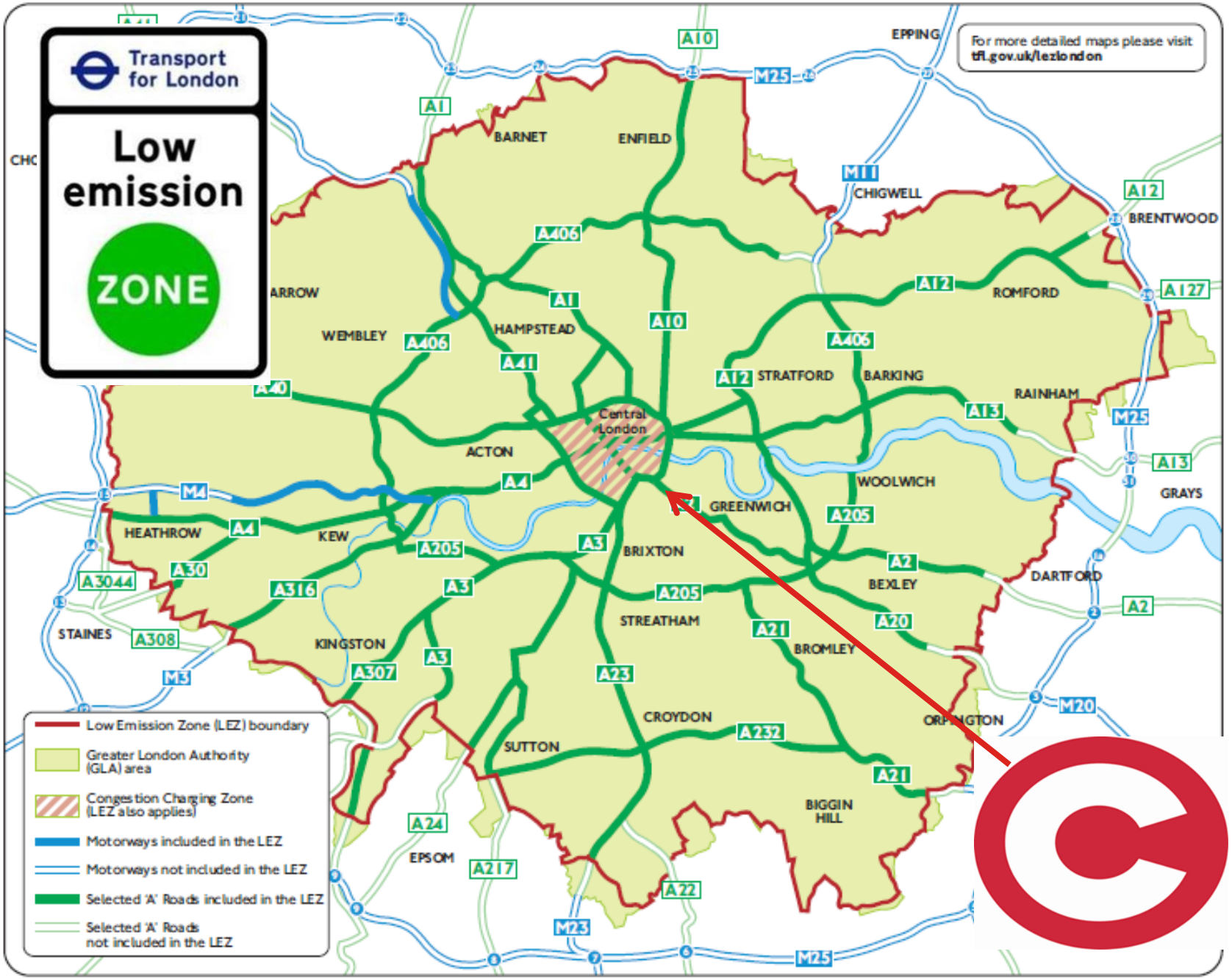
- Worked with suppliers to ensure abatement technologies available and certified



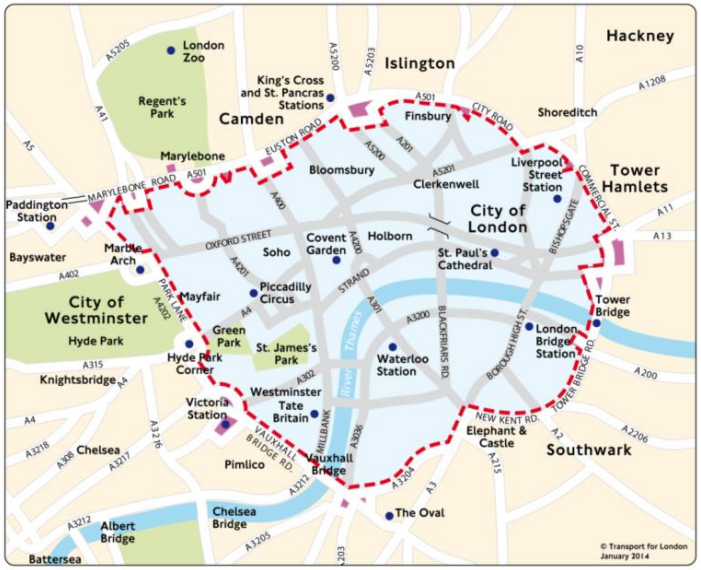

Vans and minibuses:
**99%**

HGVs, buses & coaches:
**96%**

**Now meet EU limit values for PM**


Transport for London
Low emission
ZONE
For more detailed maps please visit tfl.gov.uk/lezlondon
Low Emission Zone (LEZ) boundary
Greater London Authority (GLA) area
Congestion Charging Zone (LEZ also applies)
Motorways included in the LEZ
Motorways not included in the LEZ
Selected 'A' Roads included in the LEZ
Selected 'A' Roads not included in the LEZ
Central London
BARNET
ENFIELD
EPPING
CHIGWELL
BRENTWOOD
ROMFORD
ARROW
WEMBLEY
HAMPSTEAD
STRATFORD
BARKING
RAINHAM
ACTON
WOOLWICH
GRAYS
GREENWICH
HEATHROW
KEW
BRIXTON
BEXLEY
DARTFORD
STAINES
KINGSTON
STREATHAM
BROMLEY
CROYDON
SUTTON
BIGGIN HILL
EPSOM
A10
M25
A1
M11
A12
A127
A406
A41
A40
A13
A4
M4
A205
A3
A2
A30
A3044
A316
A308
M3
A307
A21
A20
A23
A232
M20
A24
A217
A22
M23

# Congestion Charge Zone




## Objective of scheme:

Charge acts as a deterrent to reduce traffic and traffic congestion (a charge, not a ban)

## Secondary benefits

1. Raise revenue to re-invest in transport
2. Reduce emissions

Complementary transport measures introduced at same time:

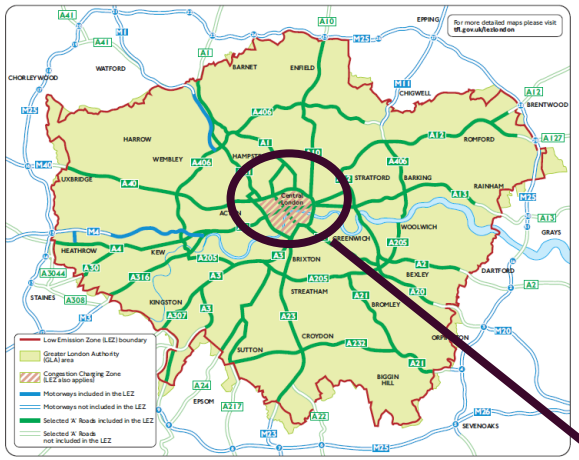
- Increase in bus capacity
- Freeze in public transport fares
- Train and tube service frequency improvements
- Traffic management measures

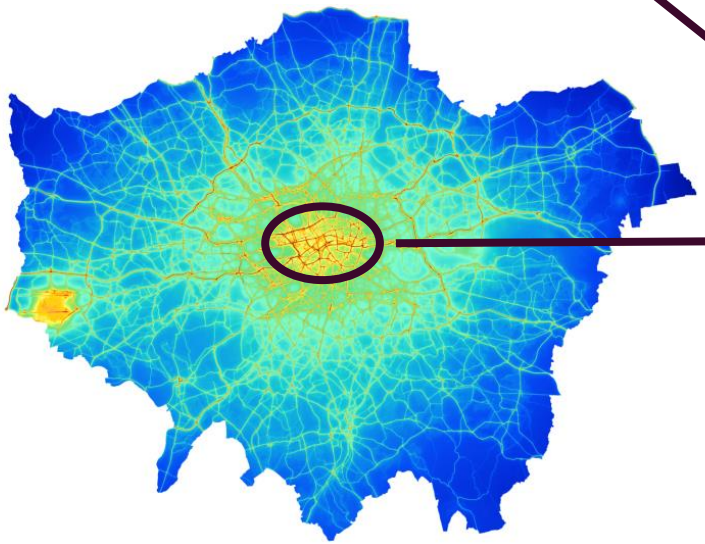
# Lessons from LEZ and CC

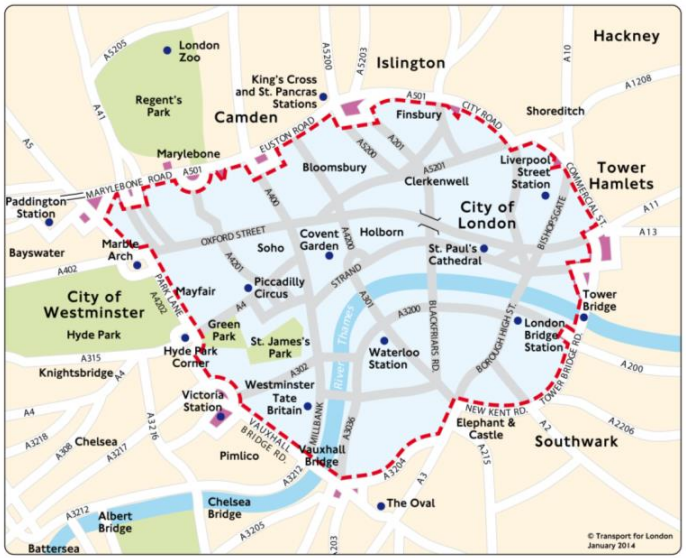
- Political commitment is key – no referendum
- Effective research and clear policy objectives – make sure everyone understands the intentions and options
- Extensive public consultation, stakeholder and industry engagement - be prepared to make changes/improvements and listen to customers/industry
- Good public transport alternatives (CC)
- Effective management of external suppliers (abatement industry) and certification and testing bodies (LEZ)
- Strong public information campaigns – encouraging action ASAP
- NB Mayor has devolved powers on road user charging

# CC + LEZ sets strong foundations for ULEZ

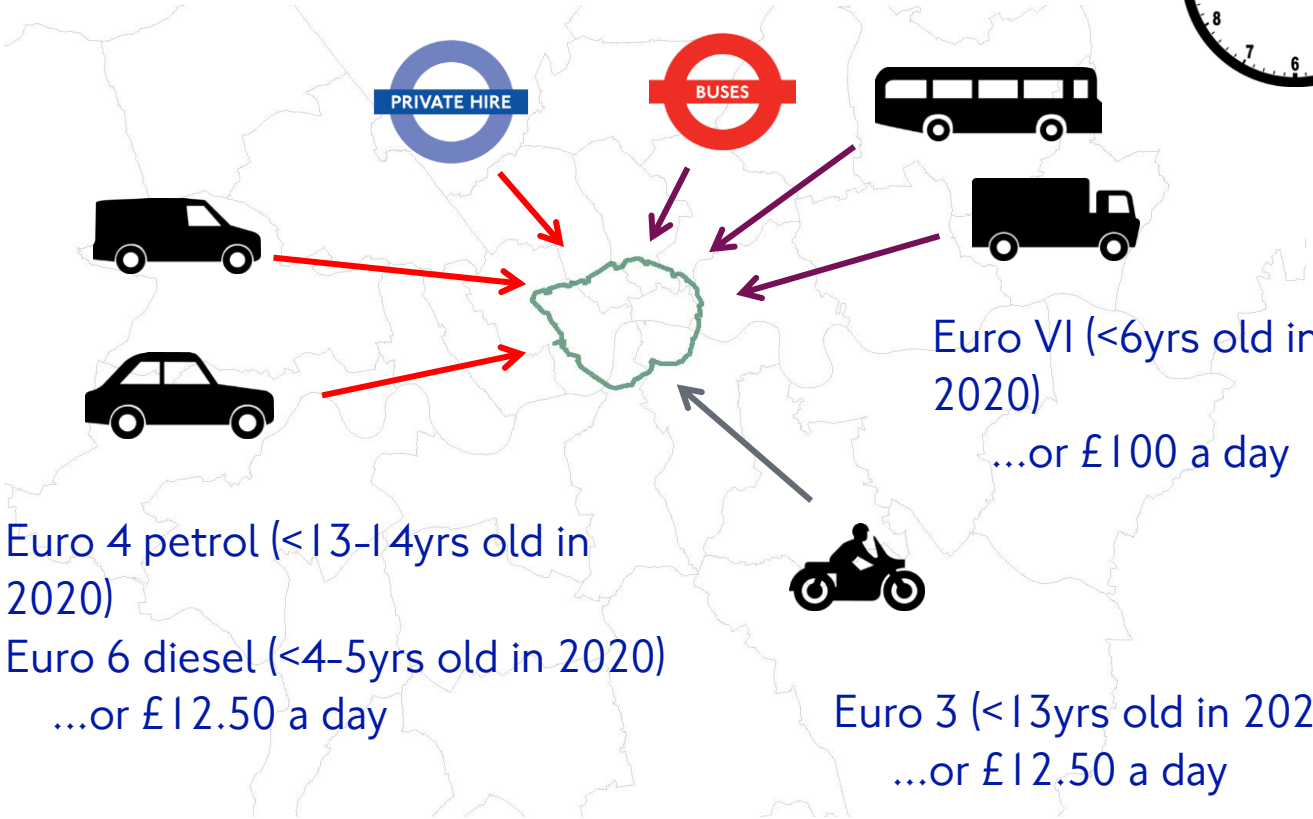
- Uses LEZ Scheme Order
- Congestion charging zone but 24/7
- All vehicle types, varying charges for light/heavy
- CC already has 100% discount for ULEVs





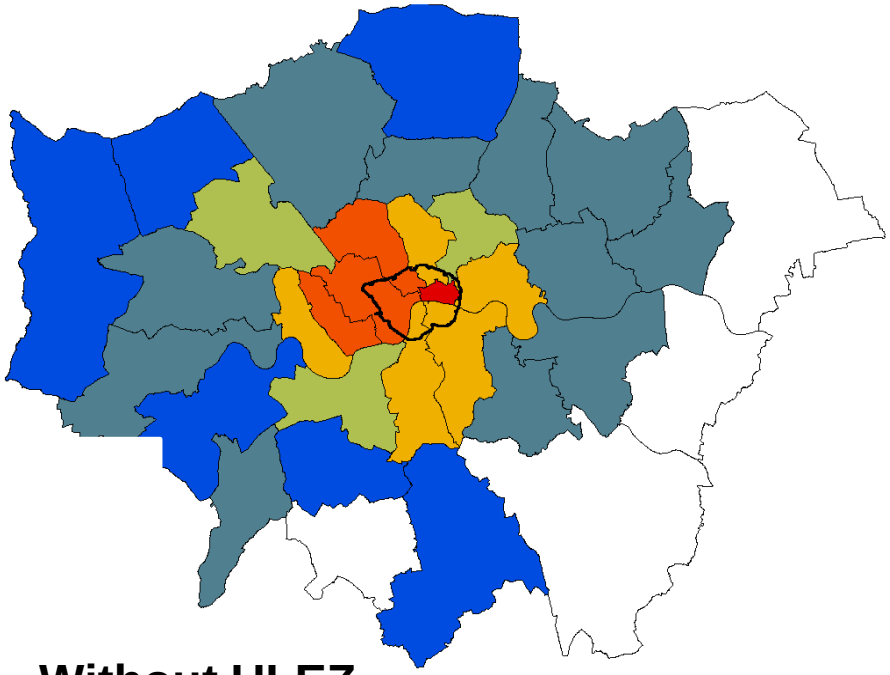
# ULEZ: from 7 September 2020



- **TfL buses:** in central London in 2020, all single deck buses will be zero emission and double deck buses hybrid
- **Taxi and private hire vehicles:** introduce ZEC licensing requirements for new taxis in 2018 and new PHVs in 2020; decommissioning scheme; taxi top-up grants

# Demonstrating impact

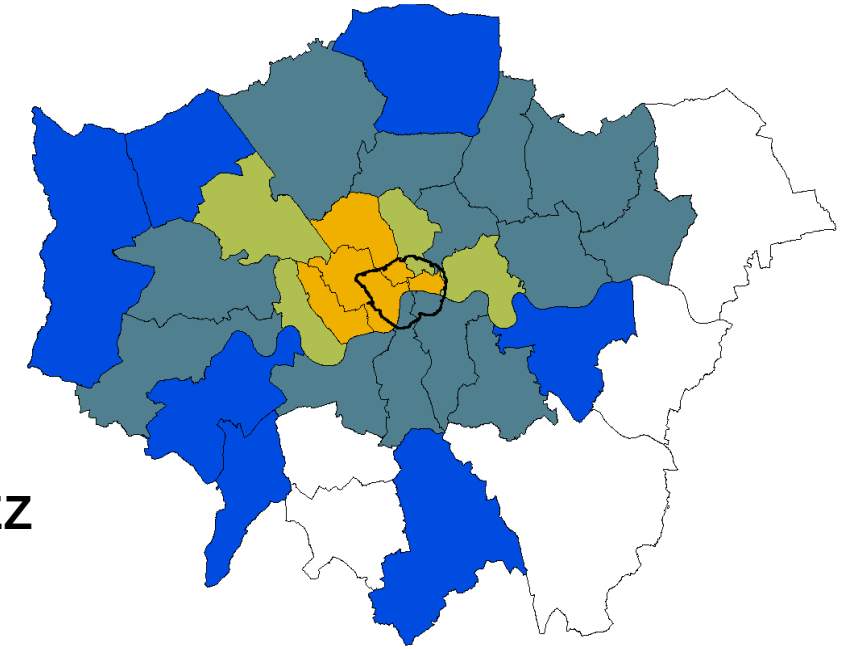
Proportion of borough population living in areas of NO2 exceedance in 2020:



Without ULEZ

Percentage of population living in areas of NO2 exceedence

- 50 to 60
- 30 to 50
- 10 to 30
- 5 to 10
- 1 to 5
- 0 to 1
- 0



With ULEZ

## NOx emissions savings:

- 49% Central London
- 18% Inner London
- 14% London-wide

# Future thinking: upscaling through zones

Tightening the ULEZ…?

Tightening London-wide LEZ to Euro VI for heavy vehicles..?

Expanding the ULEZ…?

**Challenges:**

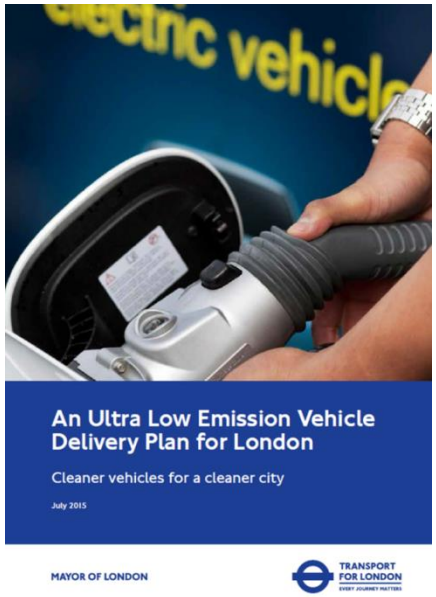
- Vehicle availability limits what is achievable
- Cost of compliance vs. emissions benefits
- Cost of new infrastructure e.g. cameras
- Public awareness and understanding
- Awaiting a new Mayor – must respond to new political direction

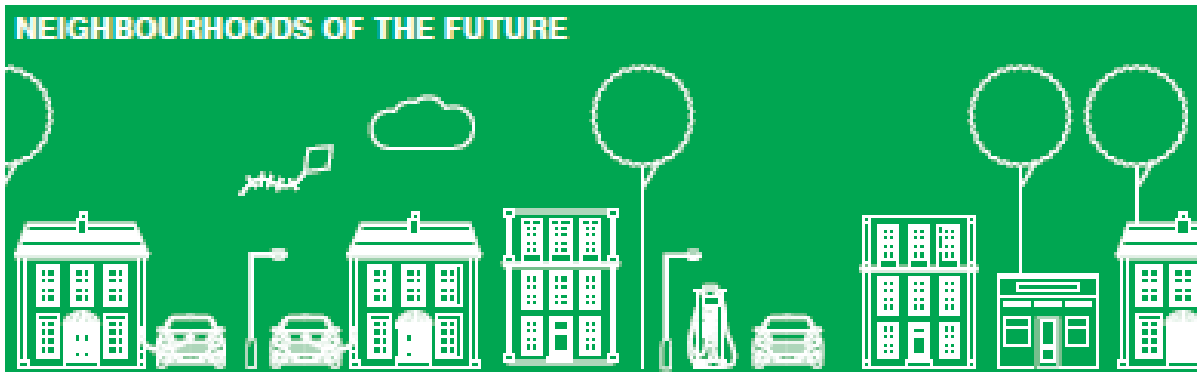
# Upscaling vehicles – change requires much more than just regulation

## Trials and research on TfL buses

## Targeting specific vehicles using our licencing powers and permits

## Action on barriers to EV uptake




## Tackling local hotspots