LONDON’S AIR QUALITY PROGRAMME

Elliot Treharne
Head of Air Quality
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MAYOR OF LONDON
$\text{NO}_2$ – A EUROPE WIDE CHALLENGE

Nitrogen Dioxide (NO2) in Europe
DIESEL PERFORMANCE

On-road measured value, measurements taken between 2011 and 2017 (IVL, 2017)

Euro emission limit

Source: ICCT
DIESELISATION

Number of new cars registered in 2016

Year

Source: SMMT
PARTICULATE MATTER

- London had a ‘very high’ pollution episode in January, which meant PM$_{10}$ concentrations were roughly more than double the hourly legal EU limit.

- Whole of London is exposed to particulate matter (PM$_{2.5}$) levels that exceed safe limits set by the World Health Organisation.
PARTICULATE MATTER – NON-EXHAUST EMISSIONS

Percentage of PM10 emissions

<table>
<thead>
<tr>
<th>Vehicle Type</th>
<th>Exhaust</th>
<th>Tyre and brake wear</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motorcycle</td>
<td>40%</td>
<td>60%</td>
</tr>
<tr>
<td>Car</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>Taxi</td>
<td>60%</td>
<td>40%</td>
</tr>
<tr>
<td>LGV</td>
<td>70%</td>
<td>30%</td>
</tr>
<tr>
<td>HGV</td>
<td>80%</td>
<td>20%</td>
</tr>
<tr>
<td>Bus and Coach</td>
<td>90%</td>
<td>10%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100%</td>
<td>0%</td>
</tr>
</tbody>
</table>
The Mayor held a consultation on a number of air quality measures within weeks of coming into office.

“One of the biggest tasks we have when formulating these new measures is looking at how we can deal with the problem of diesel vehicles…”
During and on the day before high and very high air pollution days, air quality alerts will be displayed at:

- **2,500 bus countdown signs** and river pier signs.
- **140 road signs**, with instructions to switch engines off when stationary to reduce emissions.
- The entrance of **all 270 London Underground stations**.
HEALTHY STREETS

• Car dependency has contributed to an increase in poor public health across our city.

• By 2041, the Mayor aims for:
  – 80 per cent of Londoners’ trips to be on foot, by cycle or by using public transport (from 64%);
  – London’s total traffic to have reduced by 10 -15%;
  – All deaths and serious injuries from road collisions to be eliminated.
New double decks have been hybrid, hydrogen or electric from this year; new single decks will be zero exhaust emission from 2020.

Target: Zero emission bus fleet by 2037 at the latest.
LOW EMISSION BUS ZONES

• Deploying the greenest buses on the capital’s most polluted routes
• 12 zones by 2020
• Part of an improvement programme to 3,000 buses outside central London.
• Expected to reduce bus NOx emissions by around 84 per cent
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.
An Emissions Surcharge started on 23 October 2017
- £10 charge during Congestion Charge hours for older polluting vehicles
- On top of existing £11.50 congestion charge
- For pre-Euro 4/VI – toughest standard of any world city.
ULTRA LOW EMISSION ZONE

Central London ULEZ in 2019 (all vehicles)
- £12.50 per day
- £100 per day

London-wide ULEZ in 2020 (heavy vehicles)
- Up to £100 per day

Inner London ULEZ in 2021 (all vehicles)
- Up to £100 per day
- Up to £12.50 per day

ULEZ standards

- Petrol: Euro 4
- Diesel: Euro 6
- Motorcycle and L-Cat: Euro 3
The scheme provides motorists with independent real-world NOx information.

<table>
<thead>
<tr>
<th>Tools</th>
<th>Newer Vehicle Checker (Euro 6) Cleaner Fleet Checker</th>
<th>Used Vehicle Checker (pre-Euro 6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Source</td>
<td>EQUA Index – developed by Emissions Analytics</td>
<td>TRUE Rating - developed by TRUE Initiative</td>
</tr>
</tbody>
</table>
• GLA is working in partnership with the TRUE Initiative to develop a ‘Used Vehicle Checker’ using the TRUE Rating.

• A remote sensing project in London completed in spring and the resulting data will be incorporated into the TRUE Rating later this year.

• The CVC currently provides real world emissions information on the latest Euro 6 models, but this will be expanded to inform those wishing to learn more about real-world emissions of older, pre-Euro 6 vehicles.
NEW TRANSPORT STRATEGY

• London’s proposals will remove the dirtiest diesel vehicles before 2025.
• However, the Mayor wants a holistic approach and has set out an ambitious strategy to make London’s transport network zero carbon by 2050.
  – Zero emission zones in town centres and central London from 2025;
  – All new cars and vans in London zero emission by 2030 at the latest.
A NEW STRATEGY FOR LONDON

new Environment Strategy
Thank you
elliot.treharne@london.gov.uk