

3 May 2024

London must be ‘diesel-free’ to comply with new WHO air quality guidelines.

Average concentrations of nitrogen dioxide (“NO₂”), a toxic gas, monitored in Outer London were significantly lower in the first six months after ULEZ expansion than in the comparable period in 2022-2023. ‘Clean Air in London’ has published its NO₂ analysis and ‘Clean Air Scorecard’ of the manifestos for leading candidates in the London Mayoral election¹.

In fact, provisional air quality monitoring data shows that average concentrations of NO₂ in Outer London were significantly lower: between calendar 2022 and calendar 2023; between the first three months of 2023 and the first three months of 2024; and in the first six and first seven months after ULEZ expansion than in the comparable periods in 2022-2023.

Reductions in NO₂ concentrations could be due to a number of factors including ULEZ expansion. Data must be verified and compared over ‘like for like’ periods, with the longer the better. Judging data from a single monitor or month could create a misleading picture e.g. due to local road works, national events or poor data capture by monitors. TfL is expected to publish an official report, with verified data, for the first six-month period by June 2024.

However, earlier phases of the ULEZ in Central and Inner London showed significant reductions in NO₂ concentrations and a similar outcome is expected in Outer London. High ‘compliance rates’ and significant ‘NO₂ reductions’ at monitors are encouraging early signs. They also point to problems if the ULEZ scheme were to be scrapped e.g. how would area-wide health benefits be replicated for five million people?

London had 6.3% fewer diesel cars first registered in the nine months to 30 September 2023 (3,957) than in the comparable period in 2022 (4,225). Calendar year 2022 (7,404) was down 89.2% from 2016 (68,841). London had the fewest diesel vans first registered in the same nine months of 2023 of any region in England (6,971) i.e. in a city of around nine million people. Calendar year 2022 (10,741) was down 26.6% from 2016 (14,643).

ULEZ expansion to Outer London was the ninth phase of low and ultra low emission zones in London and targeted the final group of diesel vehicles in the last part of the London to achieve the Euro 6 emission standard and the comparable Euro 4 emission standard for petrol. These zones have played a vital role in slashing the number of diesel vehicles in London and reducing NO₂ concentrations at busy roadsides by about two-thirds over more than 15 years.

We need the next Mayor of London to discourage people from buying diesel vehicles and set a target for London to be diesel-free by 2030, with limited exemptions. We need more action for cleaner air in London between 2024 and 2028 than ever before.

Air pollution is Europe’s largest single environmental health risk². The World Health Organisation (“WHO”) also names it as the second leading cause of deaths from non-communicable diseases after tobacco smoking³ with about seven million premature deaths annually⁴.

¹ <https://cleanair.london/policy/clean-air-scorecard-2024/>

² <https://www.eea.europa.eu/publications/air-quality-in-europe-2022>

³ <https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/policy-progress>

⁴ [https://www.who.int/news-room/fact-sheets/detail/ambient-\(outdoor\)-air-quality-and-health](https://www.who.int/news-room/fact-sheets/detail/ambient-(outdoor)-air-quality-and-health)

The atmosphere comprises local air pollution and greenhouse gases. The former can be divided into particles – which are regulated for health and legal purposes by their diameter (e.g. “PM_{2.5}” and “PM₁₀”) – and gases. Nitrogen dioxide (“NO₂”), a toxic gas, is an important molecule for these purposes within the cloud of gases. It also reacts with sunlight to form ozone, the most irritant gas known.

Vehicles are typically the largest source of NO₂ at busy roadsides where the most vulnerable and economically deprived people often live. These roads are also the places where many people work, shop or travel including by public transport, walking or cycling. Other sources of NO₂ include gas heating and cooking. Average monthly concentrations of NO₂ in select European cities (January 2019–November 2023) were consistently higher in the winter than the summer⁵.

There were many reasons to believe that roads in London had the highest concentrations of NO₂ in the world in 2014⁶.

Low and Ultra Low Emission Zones

The WHO declared diesel engine exhaust carcinogenic to humans on 12 June 2012⁷. Pre-Euro 6 diesel cars produce about three times the emissions of oxides of nitrogen (NO_x) of petrol vehicles⁸.

Traffic measures can be considered as two overlapping circles, with one targeting congestion and the other targeting emissions. Each may have second order benefits for the other.

Low and ultra low emission zones target emissions rather than congestion. Earlier versions targeted particle exhaust emissions to comply with legal limits for PM₁₀ and PM_{2.5}. Later versions, such as the Ultra Low Emission Zone (“ULEZ”) in London have targeted NO_x exhaust emissions to reduce concentrations of NO₂ at roadsides and comply with air quality guidelines and legal limits for NO₂. These schemes were expected to reduce CO₂ emissions as an additional benefit.

ULEZ expansion to Outer London was the ninth phase of low and ultra low emission zones in London and targeted the final group of diesel vehicles in the last part of the London to achieve the Euro 6 emission standard and the comparable Euro 4 emission standard for petrol. These zones have played a vital role in slashing the number of diesel vehicles first registered in London and reducing NO₂ concentrations at busy roadsides by about two-thirds.

Amsterdam and Paris are proposing bans on diesel and petrol vehicles from 2030⁹. On World Health Day (7 April 2024), more than 100 health and environmental experts called on Brussels to follow London with low and ultra low emission zones¹⁰.

Ultra Low Emission Zone expansion

The WHO slashed its air quality guidelines on 22 September 2021.

⁵ <https://www.statista.com/statistics/1185973/no2-concentrations-in-select-cities-in-europe-covid-19/>

⁶ <https://www.londonair.org.uk/london/asp/news.asp?NewsId=OxfordStHighNO2&StartIndex=31>

⁷ https://www.iarc.who.int/wp-content/uploads/2018/07/pr213_E.pdf

⁸ <https://www.rac.co.uk/drive/advice/emissions/euro-emissions-standards/>

⁹ <https://www.theguardian.com/world/2019/may/03/amsterdam-ban-petrol-diesel-cars-bikes-2030>

¹⁰ <https://www.leschercheursdair.be/2024/04/04/140-health-and-environmental-experts-ask-for-strong-clean-air-measures-in-brussels/>

The Mayor of London launched a consultation on 20 May 2022 seeking views on expanding the ULEZ to Outer London. After considering consultation responses, he announced a decision to expand the ULEZ on 25 November 2022. The ULEZ was expanded to Outer London on 29 August 2023¹¹. See the Appendix and our previous article about ULEZ expansion for details¹².

Jacobs' Integrated Impact Assessment (dated 17 May 2022) for Transport for London ("TfL") estimated that ULEZ expansion would reduce road traffic NO_x emissions from cars and motorcycles (which are the subject of ULEZ expansion) by between 7.3% and 11.4% in boroughs new to the scheme in Outer London by the end of 2023 (Appendix D, Table 9-1). The same report showed the number of people exposed to concentrations of NO₂ exceeding the WHO's interim target (of 20 µg/m³) being reduced by between 4.5% and 14.4% in most boroughs new to the scheme in Outer London by the end of 2023 (Appendix D, Table 9-6) i.e. 342,700 people. NO₂ concentrations fall sharply away from roadsides.

The consultation document for ULEZ expansion (dated May 2022) estimated that with a London-wide ULEZ in place, 145 (of 2,369) schools (mostly in outer London), 30 (of 335) care homes and 13 hospitals (of 228) were expected to meet the WHO's interim target of 20 µg/m³ for NO₂ by the end of 2023 (pages 72 to 74).

Assessing impacts

The impacts of the expanded ULEZ are likely to be seen over time by: the number of vehicles driving in the enlarged zone; their vehicle type, age, Euro standards and emissions; ULEZ compliance rates; changes in NO₂ concentrations measured by air quality monitors at roadside and other locations and complemented by computer modelling; reports identifying the cause of the changes; and improvements in public health. The last of these may take years to assess e.g. the UKHSA published estimates in 2022 for deaths attributable to air pollution in 2019¹³.

Factors which could influence changes in NO₂ concentrations between one year and the next include:

1. Changes in emission sources e.g. number of vehicles, energy appliances and industrial activities.
2. Weather conditions e.g. increased heating in cold weather and wind or rain dispersing pollutants¹⁴.
3. Economic factors or temporary restrictions e.g. COVID lockdowns or periods of national mourning.
4. Policy and regulatory changes e.g. the implementation of stricter environmental standards, fiscal changes¹⁵, improvements in public transport, legal action to enforce air quality and climate laws and the impact of other Mayoral policies¹⁶ to reduce air pollution¹⁷. Vehicle emission measures relating to the LEZ and ULEZ in London have included stricter standards for buses, taxis and private hire vehicles.
5. Specific factors relating to the implementation of the ULEZ expansion scheme e.g. pre- or post-compliance, decisions and lead times to purchase new or second-hand vehicles, scrappage

¹¹ <https://cleanair.london/policy/ulez-expansion-is-an-important-step-on-the-path-to-phasing-out-diesel-in-london/>

¹² <https://cleanair.london/policy/ulez-expansion-is-an-important-step-on-the-path-to-phasing-out-diesel-in-london/>

¹³ <https://www.gov.uk/government/publications/chemical-hazards-and-poisons-report-issue-28>

¹⁴ <https://www.metoffice.gov.uk/research/foundation/parametrizations/boundary-layer>

¹⁵ <https://www.gov.uk/government/news/drivers-to-save-50-this-year-as-fuel-duty-cut-extended>

¹⁶ <https://www.economist.com/britain/2024/04/03/sadiq-khans-london-offers-a-taste-of-starmers-britain>

¹⁷ <https://www.london.gov.uk/programmes-strategies/environment-and-climate-change/environment-and-climate-change-publications/air-quality-london-2016-2024>

schemes¹⁸, discounts and exemptions¹⁹ and grace periods. For example, Wheelchair Accessible Vehicles do not need to pay the ULEZ charge until 25 October 2027.

Separate to these factors is the need for accurate, reliable and verified air quality monitoring data and computer modelling and the time taken to produce authoritative reports.

Data must be verified and compared over ‘like for like’ periods, with the longer the better. Judging data from a single monitor or month could create a misleading picture e.g. due to local road works, national events or poor data capture by monitors.

Please check TfL’s website for official details and past and future reports²⁰.

In Clean Air in London’s (“CAL’s”) opinion, the minimum period to judge the ULEZ expansion is likely to be six months from the launch of the scheme (i.e. to 29 February 2024) and more realistically, 12 months or longer. The six-month report for the Inner London ULEZ (25 October 2021)²¹ was published on 19 July 2022 i.e. about three months after the period end. The 1-year report for the Inner London scheme was published (10 February 2023) about three and a half months after the period end. Note that the Inner London scheme was 18 times larger than the Central London scheme.

The Mayor of London is expected to publish a six-month report to 29 February 2024 in late May or June 2024 i.e. about three months after the period end.

Diesel fleet

Diesel exhaust was identified as the main reason for many roads in London tending to have the highest NO₂ concentrations in the world in 2014²².

Since ‘dieselgate’ in September 2015 and the introduction of new policy measures, the number of new diesel car registrations in the UK has fallen consistently. SMMT’s outlook for 2024 and 2025 published on 5 February 2024²³ predicts:

- diesel car new registrations falling to 118,000 in 2024 and 99,000 in 2025 (from 1,285,000 in 2016, 155,000 in 2022, 142,000 in 2023).
- diesel car new registrations are expected to fall 16.9% by volume in 2024 with market share reducing to 6.0%.
- diesel car market share to slip to 4.9% in 2025.

SMMT monthly data²⁴ for the three months to 30 March 2024 (published on 4 April 2024) showed:

- 37,655 diesel cars first registered in the UK, a fall of 5.3% from 2023; and
- diesel car market share falling from 8.0% in 2023 to 6.9% in 2024.

¹⁸ <https://tfl.gov.uk/modes/driving/ultra-low-emission-zone/scrappage-schemes>

¹⁹ <https://tfl.gov.uk/modes/driving/ultra-low-emission-zone/discounts-and-exemptions>

²⁰ <https://tfl.gov.uk/corporate/publications-and-reports/ultra-low-emission-zone>

²¹ <https://www.london.gov.uk/programmes-and-strategies/environment-and-climate-change/environment-publications/expanded-ultra-low-emission-zone-six-month-report>

²² <https://www.londonair.org.uk/london/asp/news.asp?NewsId=OxfordStHighNO2&StartIndex=31>

²³ <https://www.smmmt.co.uk/2024/02/uk-new-car-and-van-forecast-january-2024/>

²⁴ <https://www.smmmt.co.uk/wp-content/uploads/SMMT-news-releases-2024-publication-dates.pdf>

Parliamentary Questions²⁵ have revealed:

- London had 6.3% fewer diesel cars first registered in the nine months to 30 September 2023 (3,957)²⁶ than in the comparable period in 2022 (4,225)²⁷ (UIN 18634 and UIN 183302).
- London had 23.0% fewer diesel cars first registered in London in the full year of 2022 (7,404) compared to the full year of 2021 (9,615)²⁸ (UIN 4772).
- London had 89.2% fewer diesel cars first registered in London in the full year of 2022 (7,404)²⁹ compared to the full year of 2016 (68,841)³⁰ (UIN 4772 and 183302).
- London had fewer diesel vans registered in the nine months ended 30 September 2023 (6,971)³¹ than any other region in England (with the next lowest being 'North East England' with 9,936) (UIN 18634).
- London had 26.6% fewer diesel vans first registered in the full year of 2022 (10,741)³² compared to the full year of 2016 (14,643)³³ (UIN 4771 and 185866).

Please note that the answer to parliamentary question UIN 4770 was corrected by the Minister in UIN 4772.

Nitrogen dioxide (NO₂) concentrations

Average NO₂ concentrations in capital cities may rise and fall between months even if there is a general underlying trend for them to increase or decrease³⁴. They fall typically in summer months when emissions from buildings are lower e.g. due to less heating and people being on holiday.

CAL identified 16 official air quality monitors in Outer London before the launch of the ULEZ expansion on 29 August 2023.

CAL has analysed the monthly average NO₂ concentrations for each of these monitors in 2022, 2023 and the first three months in 2024. This information is available on the Air Quality England³⁵ and the London Air Quality Network³⁶ websites. The analysis shows that average concentrations of NO₂ were significantly lower at air quality monitors in Outer London:

- between calendar 2022 and calendar 2023;
- between the first three months of 2023 and the first three months of 2024; and
- over the first six and first seven months (i.e. to 29 February 2024 and 31 March 2024 respectively) after ULEZ expansion than in the comparable periods in 2022-2023.

²⁵ <https://questions-statements.parliament.uk/written-questions?Page=1&House=Commons&Answered=Any&Expanded=True>

²⁶ <https://questions-statements.parliament.uk/written-questions/detail/2024-03-14/18634/>

²⁷ <https://questions-statements.parliament.uk/written-questions/detail/2023-05-02/183302>

²⁸ <https://questions-statements.parliament.uk/written-questions/detail/2023-12-01/4772>

²⁹ <https://questions-statements.parliament.uk/written-questions/detail/2023-12-01/4772>

³⁰ <https://questions-statements.parliament.uk/written-questions/detail/2023-05-02/183302>

³¹ <https://questions-statements.parliament.uk/written-questions/detail/2024-03-14/18634/>

³² <https://questions-statements.parliament.uk/written-questions/detail/2023-12-01/4771>

³³ <https://questions-statements.parliament.uk/written-questions/detail/2023-05-19/185866>

³⁴ <https://ec.europa.eu/eurostat/cache/dashboard/european-statistical-monitor/>

³⁵ https://www.airqualityengland.co.uk/local-authority/?la_id=185

³⁶ <https://londonair.org.uk/LondonAir/LATools/MonthlyAverages.aspx>

Data must be verified and compared over ‘like for like’ periods, with the longer the better. Judging data from a single monitor or month could create a misleading picture e.g. due to local road works, national events or poor data capture by monitors. TfL is expected to publish an official report, with verified data, for the first six-month period in late May or June 2024.

Earlier phases of the ULEZ in Central and Inner London showed significant reductions in NO₂ concentrations and a similar outcome is expected in Outer London.

Health outcomes

NO₂ is a toxic gas. Many scientific studies have shown that reducing it can lead to short and long-term improvements in public health³⁷. The UK committed is committed to setting ambitious new standards.³⁸

Health impacts will take much longer to assess, possibly years, because changes in air pollution may take different amounts of time to affect the health of populations in different ways. Even when some health effects are quicker (e.g. during and shortly after air pollution episodes), it will take time to collect data from multiple sources and undertake complex statistical analyses to eliminate other factors e.g. flu or changes in demographics.

The UKHSA published estimates in 2022 for deaths attributable to air pollution in 2019³⁹.

Quotes

Simon Birkett, Founder and Director of Clean Air in London (“CAL”), commented:

“We know that low emission zones work. Big problems need big solutions.

“Nine phases of low and ultra low emission zones in London have helped to reduce concentrations of nitrogen dioxide (“NO₂”) at busy roadsides by about two-thirds over more than 15 years.

“ULEZ expansion to Outer London targeted the final group of diesel vehicles in the last part of London to achieve the Euro 6 emission standard and the comparable Euro 4 emission standard for petrol.

“These steps helped London to comply nearly with the World Health Organization’s (“WHO’s”) 2006 air quality guidelines by 2022 and show how the WHO’s new interim targets and guidelines can be met by 2030 and shortly thereafter respectively.

“Provisional monitoring data shows that average concentrations of NO₂ in Outer London were significantly lower: between calendar 2022 and calendar 2023; between the first three months of 2023 and the first three months of 2024; and in the first six and first seven months after ULEZ expansion than in the comparable periods in 2022-2023.

“Several factors could explain the drop, but it is likely that ULEZ expansion and related measures have played a key role. Earlier phases of the ULEZ in Central and Inner London showed significant reductions in NO₂ concentrations and a similar outcome is expected in Outer London.

³⁷ <https://doi.org/10.1016/j.scitotenv.2021.145968>

³⁸ <https://www.gov.uk/government/news/uk-calls-for-accelerated-action-to-protect-global-biodiversity>

³⁹ <https://www.gov.uk/government/publications/chemical-hazards-and-poisons-report-issue-28>

“Other signs are also positive with high ULEZ compliance rates and CAL’s analysis of the number of diesel cars and vans first registered in London in 2022 and 2023 and recent SMMT projections confirming the ongoing shift away from diesel in London and elsewhere.

“However, the ULEZ is not the end of the story. We need the next Mayor of London to discourage people from buying diesel vehicles and set a target for London to be diesel-free by 2030, with limited exemptions. We also need more investment in other modes of travel including walking, cycling and public transport. This is the only way that London will comply fully with the WHO’s interim target for NO₂ of 20 micrograms per cubic metre (µg/m³) by 2030 and other air quality guidelines. The direction of travel is clear.

“London led the world with the launch and subsequent expansion of the ULEZ but with Amsterdam and Paris proposing bans on diesel and petrol cars by 2030 we need continued leadership in London.”

ENDS

Clean Air in London

Clean Air in London’s mission is to achieve full compliance urgently and sustainably with the World Health Organisation’s air quality guidelines throughout London and elsewhere⁴⁰. It was founded in 2006.

APPENDIX

1. Timeline

8 March 2024 *Air Quality in London 2016 – 2024 report (which includes a long list of the Mayor’s actions for cleaner air)*

<https://www.london.gov.uk/programmes-strategies/environment-and-climate-change/environment-and-climate-change-publications/air-quality-london-2016-2024>

31 October 2023 *One-month report*

<https://www.london.gov.uk/new-report-shows-ulez-expansion-working-95-cent-vehicles-across-inner-and-outer-london-now-compliant>

29 August 2023 *ULEZ expands to outer London*

<https://www.london.gov.uk/Ultra%20Low%20Emission%20Zone%20expands%20London-wide%20in%20a%20landmark%20moment%20for%20the%20capital>

25 November 2022 *Mayor announces ULEZ will be expanded London-wide*

<https://www.london.gov.uk/ultra-low-emission-zone-will-be-expanded-london-wide>

20 May 2022 *Mayor launches consultation on expanding the ULEZ to outer London*

⁴⁰ <https://cleanair.london/>

<https://tfl.gov.uk/info-for/media/press-releases/2022/may/tfl-seeks-views-on-expanding-world-leading-ulez-london-wide>

28 February 2022 *Imperial College report on asthma in London*

https://www.london.gov.uk/sites/default/files/hia_asthma_air_pollution_in_london.pdf

22 September 2021 *World Health Organisation slashes air quality guidelines*

<https://cleanair.london/policy/new-who-air-quality-guidelines/>

1 July 2021 *Mayor has ‘no plans’ to extend the ULEZ to outer London*

<https://www.london.gov.uk/who-we-are/what-london-assembly-does/questions-mayor/find-an-answer/ulez-1-7>

2. Other GLA and TfL reports about the ULEZ

<https://www.london.gov.uk/programmes-strategies/environment-and-climate-change/pollution-and-air-quality/ultra-low-emission-zone-ulez-london>

3. Previous ULEZ ‘six-month’ reports

Inner London (25 October 2021) – ‘Six month’ report (19 July 2022) i.e. three months after the period end. Note: Inner London zone was 18 times larger than the Central London zone.

<https://www.london.gov.uk/programmes-and-strategies/environment-and-climate-change/environment-publications/expanded-ultra-low-emission-zone-six-month-report>

Central London (8 April 2019) – ‘Six month’ report with data to 30 September 2019 (21 October 2019) i.e. three weeks after the period end.

<https://www.london.gov.uk/programmes-and-strategies/environment-and-climate-change/environment-publications/central-london-ulez-six-month-report>

Other ULEZ reports

<https://tfl.gov.uk/corporate/publications-and-reports/ultra-low-emission-zone#on-this-page-2>

4. Leadership by other European cities

Amsterdam and Paris are proposing bans on diesel and petrol vehicles from 2030:

<https://www.theguardian.com/world/2019/may/03/amsterdam-ban-petrol-diesel-cars-bikes-2030>

<https://urbanaccessregulations.eu/countries-mainmenu-147/netherlands-mainmenu-88/amsterdam>

<https://urbanaccessregulations.eu/countries-mainmenu-147/france/greater-paris>

Brussels – More than 100 doctors and environmentalists called for Brussels to follow London’s low emission zones on World Health Day (7 April 2024):

<https://www.theguardian.com/world/2024/apr/07/brussels-must-copy-londons-low-emissions-zones-and-save-900-lives-a-year-experts-plead>

<https://urbanaccessregulations.eu/countries-mainmenu-147/belgium/bruxelles-brussel-brussels>

5. Mayor of London’s report on Air Quality in London 2016-2024

<https://www.london.gov.uk/programmes-strategies/environment-and-climate-change/environment-and-climate-change-publications/air-quality-london-2016-2024>

6. Monthly monitoring data for nitrogen dioxide (NO₂) – 16 sites identified by CAL in August 2023

London Air Quality Network

Home page

<https://londonair.org.uk/LondonAir/Default.aspx>

Tools >> Statistics >> Monthly species reports >> Borough/Site/Year

<https://londonair.org.uk/LondonAir/LATools/MonthlyAverages.aspx>

Monitor >> Annual objectives

<https://londonair.org.uk/london/asp/publicstats.asp>

Air Quality England

Home page

<https://www.airqualityengland.co.uk/>

Greater London sites

https://www.airqualityengland.co.uk/local-authority/?la_id=999

Local authority >> Site >> Exceedance Summary – Monthly and annual data by year

https://www.airqualityengland.co.uk/site/exceedance?site_id=BN1

7. SMMT - Number of new car registrations for diesel in the UK

Full year 2023 – 71,501 diesel cars in the UK (of 1,903 million) (down 13.8%)

<https://www.smmt.co.uk/2024/01/new-car-market-delivers-best-year-since-2019-as-fleets-fuel-growth/>

Full year 2022 – 82,981 (down 38.9%)

<https://media.smmmt.co.uk/december-2023-new-car-registrations/>

Full year 2021 – 135,773 (down 48.1%)

<https://media.smmmt.co.uk/december-2021-new-car-registrations/>

New car registrations (national) – March 2024 and YTD

<https://media.smmmt.co.uk/march-2024-new-car-registrations/>

New LCV registrations (national) – March 2024 and YTD

<https://media.smmmt.co.uk/march-2024-new-lcv-registrations/>

8. Vehicle registration data

Department of Transport

<https://www.gov.uk/government/collections/vehicles-statistics>

SMMT monthly data

<https://www.smmmt.co.uk/vehicle-data/car-registrations/>

SMMT Data Shop

<https://www.smmmt.co.uk/vehicle-data/>

SMMT useful resources

<https://www.smmmt.co.uk/vehicle-data/useful-resources/>

9. Selected Parliamentary Questions since 19 May 2023

14 March 2024 - UIN 18634

To ask the Secretary of State for Transport, how many diesel (a) cars and (b) vans were registered for the first time in each (i) region of England and (ii) borough in Greater London in each month in 2023.

<https://questions-statements.parliament.uk/written-questions/detail/2024-03-14/18634/>

11 December 2023 - UIN 4772. Note: Minister corrected answer to earlier UIN 4770.

To ask the Secretary of State for Transport, with reference to the Answer of 24 May 2023 to Question 185865 on Diesel Vehicles, how many diesel cars were registered for the first time in each borough in Greater London in (a) 2021, (b) 2022 and (c) each month in 2023.

<https://questions-statements.parliament.uk/written-questions/detail/2023-12-01/4772>

11 December 2023 – UIN 4771

To ask the Secretary of State for Transport, with reference to the Answer of 24 May 2023 to Question 185865 on Diesel Vehicles, how many diesel vans were registered for the first time in each region of England in (a) 2022 and (b) each month in 2023.

<https://questions-statements.parliament.uk/written-questions/detail/2023-12-01/4771>

11 December 2023 – UIN 4773

To ask the Secretary of State for Transport, with reference to the Answer of 24 May 2023 to Question 185865 on Diesel Vehicles, how many diesel vans were registered for the first time in each borough in Greater London in (a) 2021, (b) 2022 and (c) each month in 2023.

<https://questions-statements.parliament.uk/written-questions/detail/2023-12-01/4773>

6 December 2023 – UIN 4770. Note: Minister corrected answer in subsequent UIN 4772.

To ask the Secretary of State for Transport, with reference to the Answer of 24 May 2023 to Question 185865 on Diesel Vehicles, how many diesel cars were registered for the first time in each region of England in (a) 2022 and (b) each month in 2023.

<https://questions-statements.parliament.uk/written-questions/detail/2023-12-01/4770>

Note that the keeper of the vehicle is responsible for registering and taxing the vehicle only. The keeper of the vehicle is not necessarily the owner or the driver, e.g. fleet vehicles owned by companies. Most (61% in 2022) new registrations of diesel vehicles are to company keepers.

19 May 2023 – UIN 185866

To ask the Secretary of State for Transport, how many diesel vans were registered for the first time in each region of England in (a) 2015, (b) 2016, (c) 2017, (d) 2018, (e) 2019, (f) 2020, (g) 2021 and (h) the nine months before 30 September 2022.

<https://questions-statements.parliament.uk/written-questions/detail/2023-05-19/185866>

9 May 2023 – UIN 183302

To ask the Secretary of State for Transport, how many diesel cars were registered in each region of England in (a) 2016 and (b) 2022.

<https://questions-statements.parliament.uk/written-questions/detail/2023-05-02/183302>

10. Clean Air Scorecard 2024

<https://cleanair.london/policy/clean-air-scorecard-2024/>

11. OnLondon reports

30 April 2024 – Support for ULEZ has grown since September 2023

<https://redfieldandwilsonstrategies.com/support-for-ulez-has-grown-since-september-aiding-khans-chances-of-victory/>

10 January 2024 – Susan Hall says she would ‘scrap ULEZ expansion on day one’. But how?

<https://www.onlondon.co.uk/susan-hall-says-she-would-scrap-ulez-expansion-on-day-one-but-how/>

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<https://www.onlondon.co.uk/poll-more-londoners-support-ulez-expansion-than-oppose-it/>

12. Fact checks after BBC London mayoral debate (25 April 2024)

<https://fullfact.org/news/london-mayoral-debate-april25/>

13. Greater London Low Emission Zone Charging (Amendment) Bill

<https://bills.parliament.uk/bills/3555>

22 March 2024 – Second reading

[https://hansard.parliament.uk/commons/2024-03-22/debates/3C46FF67-F909-4021-87D4-8E91410849F9/GreaterLondonLowEmissionZoneCharging\(Amendment\)Bill](https://hansard.parliament.uk/commons/2024-03-22/debates/3C46FF67-F909-4021-87D4-8E91410849F9/GreaterLondonLowEmissionZoneCharging(Amendment)Bill)

14. Investigation by Uearthed (Greenpeace’s investigatory team) (published on 27 April 2024)

<https://unearthed.greenpeace.org/2024/04/27/conservative-run-anti-ulez-facebook-groups-hosted-racist-and-islamophobic-posts/>

15. Defra annual air quality statistics (published 30 April 2024)

<https://www.gov.uk/government/statistics/air-quality-statistics#full-publication-update-history>

Emission statistics (updated 19 February 2024). NO₂ data capture greater than or equal to 75%

<https://www.gov.uk/government/statistics/emissions-of-air-pollutants>