



# **EVERY BREATH YOU TAKE** **BETTER WAYS TO** **CLEAN UP LONDON'S AIR**

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GREATER LONDON AUTHORITY  
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# Executive Summary

My report, ***Road to Nowhere: The case against expanding the ULEZ and London-wide road user charging***, examined Sadiq Khan's plan to expand the Ultra-Low Emission Zone to cover almost all of London and his intention to introduce London-wide road pricing. One of the Mayor's primary justifications for these policies is his claim that they will improve London's air quality. Having made the case for why both ULEZ expansion and London-wide road pricing should not happen, not least because neither policy will do much to improve air quality, this report will consider what the Mayor should be doing instead. The Mayor has put aside around £200 million towards the ULEZ expansion<sup>1</sup>. This is money that would be spent on installing cameras on outer London's roads in order to try and price poorer Londoners out of their cars. Instead, those funds should be used to directly improve air quality. The purpose of this report is to lay out which policies should he be pursuing to clean up London's air.

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<sup>1</sup> <https://www.standard.co.uk/news/london/ulez-expansion-greater-london-boundary-cost-two-hundred-million-pounds-b1011721.html>

# Recommendations

The nine recommendations below indicate policies that the Mayor should pursue in order to make a real difference to air quality in London. Notably, none of them make Londoners lives harder or force them to make decisions that are not in their interest. Furthermore none of these policies would add to the cost of living for Londoners and several of them would help to reduce it.

1. Invest some of the money saved by abandoning plans for a London-wide ULEZ into making the bus fleet zero-emission faster.
2. Expand zero emission bus zones, prioritising areas of poor air quality and deprivation until the bus fleet becomes completely zero emission.
3. As the bus fleet increases its number of zero emission buses, the Mayor should create more low emission bus routes continuing to prioritise areas that suffer from poor air quality.
4. Bring back the previous Boiler Cashback Scheme which provides Londoners with the opportunity of funding for cleaner and more economical heating systems.
5. The Mayor should redouble his efforts to live up to his promise to plant 2 million trees in London.
6. Install more rapid electric vehicle charging points and create additional charging hubs.
7. Accelerate the delivery of a zero emission GLA vehicle fleet.
8. Work with TfL and London boroughs to assess what blocks are preventing the further expansion of car clubs and to work together to remove them.
9. Invest some of the money saved by abandoning plans for a London-wide ULEZ to finance a bigger and better scrappage scheme, including the option of travel credits that could be spent on either car clubs or public transport.

## Zero emission buses

On 21st January 2021, Transport for London (TfL) announced that the main bus network now only uses Euro VI or cleaner buses, the same emissions standard as the Ultra-Low Emission Zone<sup>2</sup>.

The nine thousand strong bus fleet now includes more than four hundred<sup>3</sup> all electric buses including the UK's first full routes of electric double decker buses. However, whilst this represents a step forward, four hundred buses equates to just 4.4% of the bus fleet. Given the relative paucity of those numbers, there is scope for this to be significantly expanded by ensuring more of the bus fleet is zero-emission.

The Mayor has introduced twelve Low Emission Bus Zones during his term in office. Low Emission Bus Zones are bus corridors that are used only by buses with top-of-the range engines and exhaust systems that meet or exceed the highest Euro VI emissions standards. The zones have been prioritised in the worst air quality hotspots outside central London where buses contribute significantly to road transport emissions<sup>4</sup>.

A report was released in 2019 showing that the Low Emission Bus Zones have led to significant reductions in pollution levels.<sup>5</sup> The first two Low Emission Bus Zones at Putney High Street and Brixton in particular have had a major impact, with Putney High Street exceeding legal limits for just one hour so far in 2019 compared to 289 over the same period in 2016, a reduction of over 99 per cent. The average reduction in annual average Nitrogen Dioxide (NO<sub>2</sub>) at the nine Low Emission Bus Zones where monitoring is available is 28 per cent compared to 2016<sup>6</sup>.

Clearly, these Low Emission Bus Zones have worked on these routes in terms of reducing Nitrogen Dioxide. These zones have been praised by both Labour and Conservative elected representatives. It would therefore make even more of an impact on air quality if the number of low emission zones were increased by using zero emission buses. This enables the swift prioritisation of areas of poor air quality and deprivation. The Mayor's current target is for London's entire bus fleet to be zero emission by 2034.<sup>7</sup> Areas with the worst air quality should be prioritised for zero emission bus zones. The Mayor should consistently expanding these zones until the whole fleet is zero emission.

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<sup>2</sup> <https://tfl.gov.uk/info-for/media/press-releases/2021/january/london-s-buses-now-meet-ulez-emissions-standards-across-the-entire-city>

<sup>3</sup> Ibid

<sup>4</sup> <https://www.london.gov.uk/WHAT-WE-DO/environment/environment-publications/low-emission-bus-zones>

<sup>5</sup> [https://www.london.gov.uk/sites/default/files/lebz\\_report\\_sept\\_19\\_upload.pdf](https://www.london.gov.uk/sites/default/files/lebz_report_sept_19_upload.pdf)

<sup>6</sup> Ibid

<sup>7</sup> <https://www.london.gov.uk/press-releases/mayoral/mayor-host-zero-emission-bus-summit-at-city-hall>

# Reducing household emissions through a new boiler replacement scheme

It is often assumed that air pollution is only a transport-related issue. However, a sole focus on transport emissions hides the release of emissions from other sources, including household boilers. Gas boilers contribute approximately 12 per cent of London's NO<sub>x</sub> (nitrous oxide) emissions. New A-rated boilers are over 90 per cent efficient and can save over 1.2kg NO<sub>x</sub> per year compared to older boilers, as well as making significant carbon dioxide savings. Moving to a more efficient 22 boiler can also save households around £340 from their fuel bills per year<sup>8</sup>.

A London Boiler Cashback Scheme was launched by the previous Mayor Boris Johnson in February 2016, providing £400 cashback to households that replaced the oldest, most polluting boilers with the newest and cleanest models<sup>9</sup>. Funding of £2.6 million was allocated to the scheme, which provided for 6,500 owner occupiers and accredited private landlords to benefit from the scheme. An extension of this scheme would allow greater NO<sub>2</sub> savings to be achieved and more households to benefit from lower bills. It could also be prioritised within pollution hotspot areas to help tackle high NO<sub>2</sub> exceedance.

When the Mayor launched a new 'Better Boilers' scheme aimed at cutting fuel poverty during this term, this was not designed to tackle air pollution<sup>10</sup>. Nevertheless, investing a similar amount of money [£1 million] into resurrecting the London Boiler Cashback Scheme could replace an additional 2,500 boilers: a much more effective means of reducing household emissions. The Mayor was forced to scrap a £10 million eco-boiler scheme launched in 2018 after only 134 applications. The scheme failed to attract enough take-up and was shut down with £8.95 million of the original budget allocated elsewhere. Businesses were told they could save hundreds of pounds a year from making the switch. However, less than a year later the scheme was already in trouble<sup>11</sup>. Given the cost of living issues many Londoners are facing, the Mayor should resurrect and properly promote an eco-boiler scheme that would both improve air quality and save Londoners money.

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<sup>8</sup> <https://www.london.gov.uk/decisions/md1606-london-boiler-cashback-scheme>

<sup>9</sup> <https://www.standard.co.uk/lifestyle/london-life/london-boiler-cashback-scheme-what-is-it-and-am-i-eligible-a3171121.html>

<sup>10</sup> <https://www.london.gov.uk/press-releases/mayoral/mayor-tackles-fuel-poverty-with-1m-boiler-fund>

<sup>11</sup> <https://www.thesun.co.uk/news/10837173/sadiq-khan-10million-eco-boiler-scheme-flopped/>

# Tree Planting

London's trees are estimated to provide at least £133m of benefits to Londoners every year<sup>12</sup>. They help improve air quality by removing 2,241 tonnes of pollution annually, including harmful PM10 particulates and NO2 roadside emissions as well as making our streets more beautiful and encouraging walking and cycling. The ability to reduce pollution makes trees an essential part of 26 London's green infrastructure and forms part of the Mayor's air quality agenda.<sup>13</sup> There are now machines akin to giant outdoor vacuum cleaners that suck "in dirty air, filters it and then pumps it back out, clean."<sup>14</sup> These can clean air on an industrial scale and are worthy of more consideration than the Mayor appears to have given them. However a more straightforward solution would be to plant more trees.

Sadiq Khan, during his 2016 mayoral election campaign, tweeted that he would plant two million trees if elected.<sup>15</sup> The commitment to deliver two million trees also appeared on this campaign website. The Deputy Mayor for Environment, Shirley Rodrigues, said that the two million tree planting target had been ditched at her first meeting with the London Assembly's Environment Committee and that, instead, the Mayor's team would attempt to 'increase tree coverage by five per cent by 2025'<sup>16</sup>. At the end of his first term, the Mayor had only funded the planting of over 280,000 trees – a far lower figure than his original two million tree commitment to Londoners. Rather than trying to sweep his promise under the carpet, the Mayor should renew that pledge and work to hit his original target.

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<sup>12</sup> <https://www.london.gov.uk/press-releases/mayoral/mayor-announces-thousands-of-new-street-trees>

<sup>13</sup> Ibid

<sup>14</sup> <https://www.weforum.org/agenda/2016/11/air-pollution-giant-vacuum-cleaner-envinity/>

<sup>15</sup> <https://twitter.com/SadiqKhan/status/669231374486872064>

<sup>16</sup> <https://www.london.gov.uk/press-releases/assembly/tony-arbour/mayor-ditches-promise-to-plant-two-million-trees>

## Electric charging points

Transport for London published a new strategy called “London’s 2030 electric vehicle infrastructure strategy” in October 2021. The strategy states that modelling indicates that in the most likely scenario, where there is increased use of rapid, on-the-go charging, London will need around 40,000 to 60,000 charge points by 2030, of which up to 4,000 will be rapids<sup>17</sup>. The proportion of electric vehicles this infrastructure would support could result in a reduction in carbon dioxide emissions of between 1.5 and 2.6 million tonnes per year by 2030<sup>18</sup>. London currently has 10,020<sup>19</sup> public charging points within the M25 according to the Department for Transport’s last published statistics. The Mayor of London has been in office since 2016 yet, as of April 2022, there are only 736<sup>20</sup> rapid charging points. Rapid charging points that can fully charge a vehicle’s battery in around 30 minutes. On this current rate of delivery, he is unlikely to deliver the 4000 rapid charging points that TfL believes are required.

London is no longer leading the way as the region with the fastest growing network of electric vehicle charging points, having been overtaken by the West Midlands.<sup>21</sup> There are also ongoing issues with regard to the rollout, such as a lack of charging points near flats or the extent to which taxi-only rapid charging points are frequently used by other motorists, which the Mayor should be actively seeking to address. A key part of doing so would be for the Mayor to spend some of the money saved by cancelling the ULEZ expansion on a rapid expansion of rapid charging points in London.

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<sup>17</sup> TfL, London's 2030 Electric Vehicle Infrastructure Strategy, Page 4

<sup>18</sup> Ibid

<sup>19</sup> <https://www.gov.uk/government/statistics/electric-vehicle-charging-device-statistics-april-2022>

<sup>20</sup> Ibid

<sup>21</sup> [West Midlands overtakes London in UK’s electric car charger revolution | Automotive industry | The Guardian](#)



## GLA Fleet

The Mayor of London has a programme of moving the GLA Group's fleets – including the GLA, TfL, Metropolitan Police and London Fire Brigade's vehicles – to zero emission. The London Environment Strategy included a target for all vehicles to be zero emission by 2050<sup>22</sup>. This includes all new vehicles within the GLA fleet including response vehicles being zero emission capable which is essential hybrid by 2025 and zero emission GLA Group fleets by 2050. Currently, around 12% of the entire GLA Group fleet is zero emission capable. The Mayor could not say what percentage of the GLA fleet will be zero emission by 2024 when asked by my GLA Conservative colleague Tony Devenish. He has said that he wants London to be a net zero city by 2030<sup>23</sup> but his target for the GLA fleet to be entirely zero emission is 2050<sup>24</sup>. There is a clear disparity between these two targets. The Mayor has not been able to say for certain what percentage of the GLA fleet would be zero emission in three years' time. This is just another example of where the Mayor of London is not walking the walk on the environment as his own fleet of vehicles will not be completely zero emission until 2050 when he is extremely unlikely to be in office and will not be held to account for it. The Mayor should be stepping up his targets for the GLA's fleet to be zero emissions if he is serious on improving air quality and reducing emissions.

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<sup>22</sup> <https://www.london.gov.uk/questions/2021/3785>

<sup>23</sup> <https://www.london.gov.uk/press-releases/mayoral/mayor-announces-bold-plans-for-a-greener-london>

<sup>24</sup> Letter to Tony Devenish AM from the Mayor of London – 10th November 2021

## Car clubs

Car clubs are short-term car rental services that allow members access to locally parked cars and pay by the minute, hour or day. Car clubs offer an alternative model to private car ownership for the six hundred thousand Londoners who are currently car club members.<sup>25</sup> Each car club vehicle in London takes around 23.5 private vehicles off the road<sup>26</sup>, helping to tackle congestion and reducing the demand for parking. There are six car club operators in London but at least two operators have ceased working in the capital. In November 2021<sup>27</sup>, London Assembly members voted unanimously in favour of a motion that called on Sadiq Khan and TfL to conduct a review into car clubs in London to examine how they could be supported further<sup>28</sup>. London Assembly Members want the Mayor to work with TfL and London's boroughs to assess what blocks are preventing their expansion and to work together to remove them. Car clubs reduce the need for private parking and can help more Londoners give up their cars while allowing for car travel within London. In November 2021 the London Assembly unanimously passed a motion I had proposed, calling on the Mayor *"to work with TfL and London's boroughs to assess what blocks are preventing [car clubs] expansion and to work together to remove them."*<sup>29</sup> The Mayor should heed the Assembly's call and do everything he can to help car clubs to expand.

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<sup>25</sup> <https://www.citymatters.london/car-sharing-schemes-in-london-2/>

<sup>26</sup> <https://como.org.uk/wp-content/uploads/2021/06/CoMoUK-London-Car-Club-Summary-Report-2020.pdf>

<sup>27</sup> Ibid

<sup>28</sup> <https://www.london.gov.uk/press-releases/assembly/assembly-calls-for-the-expansion-of-car-clubs>

<sup>29</sup> <https://www.london.gov.uk/press-releases/assembly/assembly-calls-for-the-expansion-of-car-clubs>

## Scrappage Schemes

The Mayor's expansion of the ULEZ to the North and South Circular was accompanied by three scrappage schemes, which were funded to a total of £65 million. Contrary to the Mayor's repeated claims, this was not a sufficient amount of money and two thirds of those who applied to one of the funds for financial help were unsuccessful.<sup>30</sup> Despite this, the Mayor refused GLA Conservatives' calls for an additional £50 million to be added to the schemes using Business Rates Reserves.<sup>31</sup>

In announcing his plan to expand the ULEZ to cover almost the whole of London, the Mayor promised "to introduce the biggest scrappage scheme feasible".<sup>32</sup> However, although he has written to the Government asking for a £180 million handout,<sup>33</sup> there is currently no money actually committed to a scrappage scheme. Given that the Government has been incredibly clear that it does not consider more Government handouts to be a viable answer to TfL's financial problems, the Mayor should not rely on that being the solution to funding his scrappage scheme. It is concerning therefore that the Mayor chose to proceed with a consultation as a precursor to expanding the ULEZ on 29th August 2023.<sup>34</sup>

Nevertheless, there is an obvious way forward that would enable the Mayor to improve London's air quality without penalising those who would struggle to afford to replace their car or pay £12.50 a day. Instead of spending around £200 million on the infrastructure needed to expand the ULEZ, it would be better if the Mayor spent a sizeable chunk of that money on a significant scrappage scheme. Instead of spending taxpayers' money to stop less well-off Londoners from driving, the Mayor should spend that money on helping those Londoners to upgrade their vehicles. Equally it would be sensible to offer Londoners who scrap their vehicles other options beyond money towards a direct replacement in the form of travel credits. These might include car club membership for a number of years and vouchers towards car club usage or the chance to use those funds to pay for Travelcards or PAYG Oystercard usage.

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<sup>30</sup> <https://www.standard.co.uk/news/london/ulez-tfl-sadiq-khan-scrappage-scheme-apply-b1011865.html>

<sup>31</sup> <https://www.glaconservatives.co.uk/post/city-hall-tories-unveil-funding-plan-to-reopen-ulez-scrappage-schemes>

<sup>32</sup> <https://www.london.gov.uk/press-releases/mayoral/mayor-sets-out-london-wide-ulez-plans>

<sup>33</sup> <https://twitter.com/MayorofLondon/status/1499849555076075537/photo/1>

<sup>34</sup> <https://tfl.gov.uk/modes/driving/ultra-low-emission-zone/proposed-ulez-expansion-for-2023>

# Recommendations

The nine recommendations below indicate policies that the Mayor should pursue in order to make a real difference to air quality in London. Notably, none of them make Londoners lives harder or force them to make decisions that are not in their interest. Furthermore none of these policies would add to the cost of living for Londoners and several of them would help to reduce it.

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## Conclusion

Across these two reports, ***Road to Nowhere: The case against expanding the ULEZ and London-wide road user charging*** and ***Every Breath You Take: Better ways to clean up London's air***, I have made the case for why expanding the ULEZ would be a huge mistake, why road pricing may be worth considering at a national level but is a non-starter in London alone and why Londoners should not be fooled into believing that the revenue-raising exercise that is ULEZ expansion is the best way – or even a good way – of improving outer London's air quality.

There is no doubt London's air quality needs to improve, and it is right that the Mayor has sought to introduce measures to achieve this during this mayoral term. However, it would be ridiculous to pretend that London is not in a very different situation from when some air quality measures were decided. The capital has experienced its worst pandemic in a century, with a significant impact on the UK's economy.

As has been shown in my report ***Road to Nowhere: The case against expanding the ULEZ and London-wide road user charging***, the environmental case for a London-wide ULEZ is weak, especially when compared to its impact on the cost of living. If it were to go ahead, the most optimistic guess is that it could improve outer London air quality by ten percent. However it would do this by squeezing money from those who can least afford it. Given the Labour Party has frequently paid lip service to prioritising the cost of living as part of its strategy, it is hard to reconcile this with imposing such an additional burden on Londoners – especially when those drivers on low incomes will be least able to afford to upgrade to a new vehicle. There are other better, fairer measures that the Mayor could be prioritising that would improve air quality with far less financial impact on Londoners.



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