



**STATEMENT
on
LOCAL AIR QUALITY
and
KINGSTON COUNCIL'S AIR QUALITY ACTION PLAN**



September 2016

CONTENTS

1. THE AIR POLLUTION PROBLEM – KILLER FACTS
2. THE GREATER LONDON CONTEXT
3. THE KINGSTON CONTEXT
4. KINGSTON'S AIR QUALITY ACTION PLAN
5. REMAINING CONCERNS AND QUESTIONS
6. WHAT NEXT? TEN RECOMMENDED ACTIONS FOR KINGSTON COUNCIL
7. FURTHER READING
8. REFERENCES

ABOUT KINGSTON ENVIRONMENT FORUM

Kingston Environment Forum (KEF) is a consortium of local environmental organisations which works with Kingston Council to promote environmental sustainability in Kingston upon Thames. KEF includes representatives from a range of local groups with an interest in environmental issues and activities in the Borough. We meet quarterly to share information, concerns and expertise with relevant Council officers, and KEF representatives also attend Kingston Strategic Partnership meetings.

Our aim is to influence Council plans and to advise and assist on the implementation of the first theme in the *Kingston Plan*: "A sustainable Kingston: protecting and enhancing the environment for us and for future generations", with its objectives of tackling climate change, reducing our ecological footprint, ensuring sustainable development and transport in Kingston, and protecting and improving the quality of our local environment.

KEF began life as Kingston's Eco-Footprint Working Group, developed into Kingston Environment Group and a member of Kingston Strategic Partnership, and changed its name in 2014 to Kingston Environment Forum to reflect its role more accurately.

Find out more at <http://e-voice.org.uk/kef/> or on our Facebook page.

1. THE AIR POLLUTION PROBLEM – KILLER FACTS

1.1 Premature deaths: Air pollution increases the risk of heart disease, stroke, asthma and even cancer. It has been estimated that there is a 12 year reduction in life span for those living near busy roads. Air pollution has been estimated to cause around 40,000 early deaths a year in the UK,¹ and the situation does not seem to be improving: a recent academic report estimated that more than 50,000 deaths a year in the UK can be attributed to air pollution while planners concentrate on reducing road deaths and promoting growth at the expense of the environment.²

1.2 Effects on children: Children are more at risk because they are often closer to vehicle emissions and their lungs are still developing. The greatest problem is with nitrogen dioxide (NO₂), a pollutant that inflames the lungs, stunting their growth and increasing the risk of respiratory diseases such as asthma and lung cancer; children may have smaller lungs for life.³ Links have also been found between air pollution and mental illness in children,⁴ and there are also health impacts on unborn children.⁵ Community monitors in nearby Kew found that local school drop-off zones were 3 times more polluted than other roadsides.⁶

1.3 Air quality inside cars and taxis is actually worse than the air pollution on the road.⁷ The air intakes of motor vehicles are close to exhaust-pipe level and air filters are far from perfect and need regular upkeep to work properly. Pollution monitoring has found emissions to be 2.5 times higher inside a vehicle, so sitting inside a car can be more dangerous for your health than walking or cycling.⁸ From *The Guardian* in February 2016:⁹

‘Parents start arriving to collect their children, who stream out noisily. Most are walking but some are in cars – one has “Prince on Board” in the rear window – and the NO₂ level rises. At a school in Cheltenham, where many children are picked up by car, Mounsor recently measured a tripling in NO₂ levels during the school run. But the more surprising discovery takes place when Mounsor moves off to simulate a car journey home from school. He finds that NO₂ levels are 2.5 times higher inside the vehicle than outside. “There’s a concentrating effect of being in a confined space,” he says. Ali-Webber calls it “sweet justice”. “The public health message is, you can’t hide from air pollution inside a car,” says Ben Barratt, an air quality expert at King’s College London (KCL).’

The further one is from the source of pollution the less there is: cyclists tend to be above it and only suffer from pollution in short bursts, and pedestrians walking on the inside of pavements suffer less from pollution than if they walk closer to the road.

1.4 Health impacts in Kingston: The GLA’s “Air Quality Information for Public Health Professionals – London Borough of Kingston upon Thames” (September 2013)¹⁰ provides data specific to Kingston. Deaths attributable to exposure to Particulate Matter (PM) in Kingston were 20% higher than the UK average and the 9th worst in London, and the % of mortality attributable to long term exposure to PM in Kingston was 6.7%. A table on page 18 of the document shows the 91 deaths in 2008 in Kingston attributable to exposure to PM by ward.

1.5 Other health impacts: Tiny particles of toxic pollution have been discovered inside samples of brain tissue, according to research published in September 2016, which suggested a possible contribution to diseases like Alzheimer’s.¹¹ Air pollution has even been linked with premature ageing of the skin!¹²

“A developed country is not a place where the poor have cars. It’s where the rich use public transportation.”
Gustavo Petro, Mayor of Bogotá. Colombia

2. THE GREATER LONDON CONTEXT

2.1 Road traffic generally has increased tenfold since 1949. The number of HGVs is decreasing, but there are more LGVs on the roads, probably because of the growth of internet shopping and home deliveries.



In the past 2 years, more Londoners have died from air pollution than during the Great Smog of 1952-53, which killed about 12,000 residents in Greater London.¹³ Although most pollutants today are invisible, there was a 3-day smog in London in January 2016. Invisible pollution causes up to 9,000 early deaths a year in Greater London.

The new Mayor of London has called air pollution 'our biggest environmental challenge' and plans to bring the increased ultra-low emission zone into force early.¹⁴ He is being urged to do even more, which could help to improve Kingston's air quality.¹⁵

2.2 The key findings of 'Lethal and Illegal' (IPPR report, July 2016¹⁶):

'... • London is breaking legal and WHO limits for NO₂ and WHO limits for particulate matter. Under the existing policy regime the capital is not set to reach compliance with the legal limits on NO₂ until 2025 or beyond. • Most air pollution in London is caused by road transport, of which diesel vehicles are the most polluting. Efforts must be made to reduce the number of diesel vehicles on the road, both by increasing the proportion of cleaner and greener vehicles and by a continued shift towards alternative forms of transport, including public transport, walking and cycling. • It is likely that diesel cars will have to be completely phased out on London's roads over the next decade in order to reach compliance with safe and legal levels of air pollution. Such a shift would not be easy to achieve in such a short space of time, but it would not be impossible...

... Local policy changes: At the local level the new mayor of London has already indicated a willingness to take much more radical action than his predecessor. Policy measures that are likely to be needed in order to achieve compliance with legal air pollution limits include: • the expansion of the new ultra-low emissions zone (ULEZ) across the whole of inner London • the progressive tightening of emissions standards within the low emissions zone (covering the whole of London) for lorries, vans, buses and taxis, with the aim of progressively phasing out diesel buses and taxis altogether • the introduction of new policies to promote alternative forms of sustainable transport...'

2.3 Clean Air in London¹⁷ says: 'Air pollution in our biggest cities is much worse than most of us have realised. It averages well over twice World Health Organisation (WHO) guidelines and legal limits near many of London's busiest roads. Mayor Johnson estimated some 4,300 premature deaths in London in 2008 were attributable to long-term exposure to dangerous airborne particles alone.'

2.4 Even London parks, including several in the borough of Kingston, suffer from high pollutions levels, as a map created by data science company ASI revealed in August 2016.¹⁸

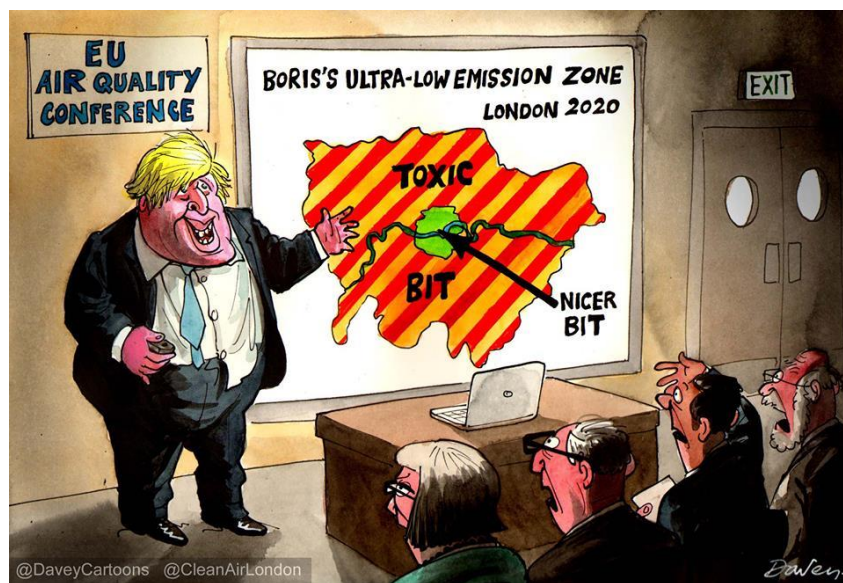
2.5 The Mayor of London’s Clean Air Consultation, results of which were published in September 2016, found that:

‘7 in 10 Londoners want the boundaries for the ULEZ [Ultra-Low Emission Zone] to be extended up to the North/South circular or Londonwide for light vehicles. This rises to 87 per cent for heavy vehicles.

The introduction of an ‘Emissions Surcharge’ from next year was supported by 81 per cent of you. This is an extra charge for the oldest, most polluting vehicles, driving at peak times in the Congestion Charging Zone (CCZ). 41 per cent of you think that £10 is the right level of daily charge for vehicles that do not meet emissions standards.

There is widespread support (77 per cent) for the Mayor’s call to Government for a diesel scrappage scheme to help Londoners switch away from polluting cars...’¹⁹

3. THE KINGSTON CONTEXT



3.1 Kingston’s Air Quality Action Plan (AQAP) was developed against a background of London-wide concern about the public health and legal implications of continued non-compliance with legislation. Air quality was a major issue in the 2016 London mayoral elections, and the London media have helped to raise public awareness of air pollution and its many impacts on health. However, to judge by the turn-out at July’s ‘Kingston Conversations’ on air quality, it is still a minority concern in Kingston, perhaps because air pollution is invisible and residents assume it is a problem elsewhere and not here.

‘People don’t realise the dangers of air pollution these days, because you can’t smell it, taste it or touch it. But it is still damaging for your health.’

Duncan Mounsor, MD of Enviro Technology Services

20

3.2 From Kingston Council's Air Quality Action Plan:

'...Air quality assessments undertaken by the Royal Borough of Kingston upon Thames identified that the Government's air quality objective for annual mean nitrogen dioxide and daily mean particulates (PM10) were not being met within the Borough (as with most of London) by the target dates. As a consequence, the Council designated an Air Quality Management Area (AQMA) across the whole of the Borough and produced an Air Quality Action Plan in recognition of the legal requirement on the Council to work towards air quality objectives; as required under Part IV of the Environment Act 1995 and the relevant air quality regulations. Most of the air pollution in the AQMA is caused by road traffic, although boilers (both domestic and industrial) and other more minor sources also contribute.'²¹

3.3 Kingston air quality data: KEF has filed the 2014 Air Quality tables on its website.²² You can check the readings from Kingston's 2 monitoring stations at Tolworth and at Sopwith Way on the London Air Quality Network (King's College) website.²³

3.4 Roads: the A3 and the one-way system in Kingston town centre in particular are well over the legal limit. Air pollution in 'leafy suburbs' like Kingston is not caused by dirty industries, of which we have few; the biggest source of air pollution is road traffic - cars, cars, taxis, buses, lorries, especially from diesel vehicles (now 50% of cars), and associated brake- and tyre- dust. Emissions from domestic and commercial premises' boilers²⁴ are also a factor, while some pollution also drifts in from elsewhere, as air and winds do not respect borders.

3.5 Schools: Kingston's Tiffin school was among was amongst the 90 worst secondary schools in London for air pollution listed in June 2016²⁵, on a par with many inner London schools. It seems likely that other schools in Kingston near busy roads, for example Southborough Boys' and Tolworth Girls', both very close to the A3, will also be negatively affected by air pollution, even if they didn't make it into the worst 90.

3.6 Growth and development: Kingston's 'Direction of Travel'²⁶ envisages more development, which seems likely to lead to higher air pollution levels, with more housing, 55,000 more residents by 2050, 50,000 m² more retail space bringing in more visitors, more parking, more cars... 'By 2050 the population of the borough is expected to grow by 30 per cent. That's over 50,000 extra people, than there were in 2015, who will need to move around the borough...'²⁷ How will the added traffic and air pollution that this growth could bring be mitigated?

4. KINGSTON'S AIR QUALITY ACTION PLAN²⁸

4.1 Kingston Council's final Air Quality Action Plan (AQAP), July 2016, was adopted at the Adults' and Children's Committee meeting on 21/6/16, with cross-party agreement on the principles and actions proposed. The AQAP is intended 'to prevent deterioration of, and ultimately improve, air quality in the Borough between January 2016 and December 2021. RBK, like most London boroughs, exceeds the Government's target on annual mean nitrogen dioxide (NO₂) and daily mean particulates (PM10) in certain locations. To tackle this, the plan is to establish an Air Quality Management Area across the Borough to work towards improved air quality objectives such those as required under Part IV of the Environment Act 1995 and other metropolitan regulations.'

4.2 We welcome the good advice and the intention to deal with Kingston's air pollution in the AP, and find much in it to commend, including: the intention to promote and facilitate low emission cars, buses and freight vehicles; the encouragement of cycling, in the Go Cycle programme, and of walking by improving walking routes; increased tree and other planting; the joined-up work with the public health sector; the acknowledgement that monitoring air quality does not in itself improve air quality...

At the Committee meeting on 21/6/16, there was some reassurance from Council officers that the low to medium impact actions proposed in the AP would be sufficient cumulatively to meet its targets. However, it is not clear when work on the more ambitious target of improving Kingston's air quality is likely to begin.

There are several possible strategies on air quality, including: prevention and reduction of emissions; mitigating and cleaning up emissions; and avoiding or working around the worst air pollution. The AQAP includes all of these, but we can't but observe that the strategies for preventing and reducing emissions seem to be the weakest.

So we do have some concerns and questions about the plans and about the realism of some of the hopes expressed in the AQAP, spelt out in the next two sections.

5. REMAINING CONCERNS AND QUESTIONS

5.1 Public transport: It has been estimated that if everyone in the UK used a bus once a week instead of taking the car, there would be one billion fewer car journeys.²⁹ Buses can, of course, be even more polluting than cars, particularly when held up by traffic congestion, which also acts as a deterrent to bus use,³⁰ and a bus carrying just a very few passengers must be even worse for the air than a car carrying the same number of passengers. So moving over to LE buses, ideally smaller, more frequent, better connected buses to encourage use, must be a priority. We are glad to see that the Council is talking to TfL about this (Actions #2 & 3), and wonder what can be done to persuade TfL and the Mayor of London that outer London boroughs need better air quality and LE buses.

However, care should be taken to avoid possible unintended consequences of bus lanes and priorities (Action #1), such as worse congestion, and thus more pollution, in other lanes.

5.2 Air quality (AQ) targets: While recognising that some of the solutions to air pollution have to be London-wide, even national and international (for example, more stringent standards for vehicle manufacturers, a scrappage system for diesel vehicles, reducing the cost of public transport while raising the cost of private transport...), we would welcome tougher local targets that would bring Kingston's air up to the legal standards faster, we would welcome the extension of the London Low Emission Zone to Kingston (Action#5) and neighbouring boroughs, and we would support Kingston in lobbying London and the Government for these changes which are beyond the remit of a local council. However, we also wonder if Kingston could independently introduce an Ultra Low Emission Zone (ULEZ) in Kingston town centre, on the lines of the one that will come into force in central London in 2020.³¹

5.3 Parking: Planning applications for new developments in town centre locations usually include limited parking in an attempt to discourage car ownership and use (often unpopular with nearby residents who suspect that it will simply mean more parking on their roads). Though we

hope that this is effective, we wonder if there is good evidence of changed behaviour (in reduced car usage) when developments offer limited parking?

Also, how does the Council square the need to discourage car travel with its tendency to allow 30 minutes free parking near shops whenever it is demanded vociferously enough, which to our minds simply encourages people to drive to local shops that they could in fact walk or cycle to? We wonder how rigorously Action #7 on parking and planning will be enforced.

5.4 Tackling congestion: Has the Council seriously considered imposing a 20 mph speed limit across the borough, perhaps with some flexibility at quiet times and/or on main roads? 300 local campaigns around the country and many cities in the UK have already adopted a 20 mph limit for most of their streets - see 'Twenty's Plenty...'³² 20 mph limits can encourage steadier driving, using less fuel with less stopping and starting, thus emitting less pollution. They can also encourage more walking or cycling by making them safer, thus further reducing pollution. The current patchwork of 20 mph zones in some residential areas is unsatisfactory and confusing for drivers.

Other actions to keep traffic flowing and reduce idling, could include foot/cycle bridges to replace pedestrian crossings, better timed, more responsive traffic lights (for example responding faster to pedestrian requests and turned off when there is little traffic) and better signage about car park queues.

It is good see the intention to promote electric cars and car clubs (Actions #8 & 10) and we wonder if these and car-sharing could be positively incentivised. We also wonder whether some kind of incentive/reward could be offered to people who use public or other sustainable transport to commute or shop (difficult to administer, we realise, but could be effective)? Kingston's road system has little if any spare capacity and there is little space for new roads or new railways or tramlines, so ultimately fewer cars, as well as more low emission vehicles, must be the best way forward.

5.5 Cycling: 'By 2050 the population of the borough is expected to grow by 30 per cent. That's over 50,000 extra people, than there were in 2015, who will need to move around the borough. Sustainable travel is key to accommodating that growth and ensuring the continued success of the borough whilst the spaces for travelling remain the same.'³³ KEF welcomes the current investment in local cycling which has the potential to make a major contribution to sustainable travel as well as to improving air quality and public health³⁴ (Actions #12 - 15). However, we stress that, if the intention is genuinely to get people out of cars and onto bikes, funding should be directed to schemes that do indeed make cycling safer: segregated cycle lanes through quiet or green routes where possible, and a clearly signposted, joined-up network of cycle lanes.

5.6 Walking and pedestrianisation: We note that Action #16 aims to improve the walking network in Kingston, and wonder if there is room for more traffic-free streets or occasional car-free days in our borough? Clarence Street has benefitted hugely from being pedestrianised, and the recent announcement that Oxford Street could be pedestrianised by 2020³⁵ as part of London Mayor Sadiq Khan's plans to tackle air pollution, is an encouraging example.

5.7 Schools (Action #17 on Travel Plans): Is reviewing schools' transport plans or increasing the number of schools with active travel plans really likely to produce a medium air quality impact? Simply having a Travel Plan does not seem to us to be sufficient. Are they well communicated to staff and parents? How are they implemented and enforced? How much impact do they actually have? Are signs (Action #9) enough to deter parents from idling their engines outside schools?

5.8 Travel Plans generally (Action #18): We wonder how effective these are and how businesses' travel plans will be disseminated and enforced?

5.9 Development and growth in Kingston:³⁶ Residents are generally concerned about the cumulative impacts of all the proposed developments across the borough on local infrastructure, traffic, services and green spaces. More housing, more retail (50,000 m² more is projected), more jobs and office space, more parking, are all likely to mean more traffic and more air pollution. Even Crossrail 2, which should reduce road traffic, could encourage more people to drive into the borough to park and ride. We commend the intention to include air quality mitigation (Action #19) in planning guidelines and permissions, and hope that this can be enforced.

5.10 Trees, green spaces, green walls: We are pleased to see the inclusion of these low- tech improvements to the local environment in the AQAP (Action #20) as they do have an important role to play in cleansing the air: they lock up CO₂ as they grow, and leaves mop up particulates.³⁷ However, trees in particular do involve maintenance, and much public ambivalence about trees is caused by poor maintenance: new trees that are not sufficiently watered or surrounded by hard surfaces and so die and are not replaced (thus doing little to reduce air or noise pollution);



dangerous trees that are not pruned or replaced; and the lack of street sweeping when leaves fall in autumn. Trees offer many benefits, but they are not necessarily a low-cost solution if maintained properly.

Although it has been suggested that dense tree canopies can trap air pollution³⁸ by creating a tunnel or canyon effect, this has been vigorously contested by the London Tree Officers Association who remind us that 'that environmental, social, economic, health and wellbeing benefits of trees are well documented...'³⁹; and in any case the research perhaps merely reminds us of the need to select varieties of tree carefully for different sites, and then to maintain them properly.

5.11 Reducing emissions from buildings (Action #21): We suggest that the Council begin with its own buildings - the Guildhall (notoriously over-heated), schools (which, for example, have proved remarkably reluctant to install solar panels) and Council housing stock as it is replaced or renovated. Council-owned properties could and should be models of energy-efficiency for the rest of the community to follow. Sound advice on energy efficiency in homes and businesses can not only save money but help to reduce emissions from boilers.

5.12 Monitoring pollution: How up-to-date and accessible to the public is the data collected by RBK air quality monitoring? Would making it more public and visible than it currently is it have some educational value? For example, there were some interesting maps available to participants in the July 2016 "Kingston Conversations" on air quality; could these be available on the Council website as well as displaying current air pollution information on electronic signboards on the worst roads?

Could residents, residents' groups, local environmentalists, schools etc. help to monitor air pollution and improvements in air quality in the areas not covered by the Council's monitoring stations? Would the Council pay for diffusion tubes, and coordinate and advise on their use? Could local naturalists monitor lichen growth, a good natural indicator of clean air?

5.13 Avoidance⁴⁰: Some of RBK's proposed actions seem to be more concerned with avoidance and adaptation than with dealing with the problem, for example, informing residents about high pollution days (Action #24) or advising pedestrians and cyclists to use less polluted routes. Although reasonable in the short term, these should not be allowed to divert attention and resources from tackling the main sources of emissions.

5.14 The A3: What, if anything, can be done by Kingston Council, to reduce air pollution on the A3, close to which are many homes, with more in the pipeline, and two secondary schools? How likely and how feasible is the ambitious (and costly?) proposal we sometimes hear about to cover over the A3 (or part of the A3). And would this improve overall air quality or merely displace pollution?

5.15 Love Clean Air⁴¹: It is good to learn that Kingston Council has recognised that the Love Clean Air project established by the South London Air Quality Cluster Group (comprising most of our neighbouring boroughs: Bromley, Croydon, Lewisham, Merton, Richmond, Sutton, and Wandsworth) could be a useful project and group to join. We hope that enquiries about joining prove positive, as sharing ideas and information with neighbouring boroughs seems to us to be a low-cost but potentially useful action.

5.16 Public education and awareness-raising: This is badly needed on various air pollution issues. There is always considerable resistance from drivers to any action aimed at reducing car journeys or restricting their freedoms to park, drive fast, idle... (Action #9). What does the Council intend to do to educate the public and convince motorists that reducing traffic, congestion and emissions is in their interest too (see, for example, Section 1)?

Detailed, up-to-date, and publicly accessible information about Kingston's air pollution, as well as positive public health messages about the benefits of walking and cycling (even in polluted air)⁴², might help to communicate the message. We are pleased that Kingston is a partner in AirText,⁴³ a service offering air pollution forecasting and alerts through email, telephone and a smartphone app - this probably needs to be better publicised.

There is also education to be done on the value of trees⁴⁴, which could encourage residents and groups to request, plant and/or nurture trees in their areas, or at the very least to tolerate trees.

Could KEF and its member-groups help to raise local awareness of the health impacts of air pollution and the benefits to all of prevention and mitigation?

5.17 Brexit: It is to be hoped that withdrawal from the EU will not entail wholesale abandonment of UK laws and standards based on EU directives⁴⁵ – though, even if EU-inspired laws are rejected, the health problems caused by air pollution will continue, and will continue to lead to extra demands on local services and the NHS, and early deaths.

The indirect effects of continuing uncertainty about Brexit and the UK economy may be more significant: there could be less government spending and less money and willingness from developers to make environmental concessions and/or contributions to local infrastructure.

5.18 Heathrow expansion: According to local MP Zac Goldsmith in an email dated 18/7/16, 'With only 2 runways at the moment, air pollution around Heathrow already exceeds EU limits. An extra runway would add 300,000 extra flights and 25 million additional road passenger journeys a year creating even more pollution.' It was good to see the leader of Kingston Council as one of the 11 signatories to a letter to Prime Minister Teresa May, urging her to back Gatwick expansion over Heathrow.⁴⁶ We hope that Kingston will continue to oppose Heathrow expansion on grounds of the

potential effects on local traffic and air pollution as well as noise pollution. However, as environmentalist, KEF members also believe that no airport should be expanded if the UK is to meet its CO² targets and limit air and noise pollution in the wider South East.

5.19 Timetable for action: Action plans are only the first step in making our air safe and clean - taking action is the next and more important phase. What is the schedule for reducing air pollution in Kingston? When is our borough going to be fully compliant with air quality regulations?

6. WHAT NEXT? TEN RECOMMENDED ACTIONS FOR KINGSTON COUNCIL

We realise that not all the issues listed above, particularly in Section 5, can be addressed immediately or easily, or by Kingston Council acting on its own, so in this section we suggest some relatively straightforward and low-cost undertakings that could be implemented sooner rather than later.

6.1 Start tackling traffic congestion: Hold a consultation on 20mph speed limits throughout the borough and encourage and incentivise car-sharing (car-sharing lanes?) and car clubs.

6.2 Reprogram Kingston's traffic lights: They should not hold up traffic needlessly, for example, during the early hours of the morning, i.e. 2-4am, or when there are no pedestrians waiting to cross, causing unnecessary idling and stop-start driving and thus more pollution,

6.3 Deter idling: encourage good behaviour with an information campaign. Perhaps volunteers - parents outside schools, members of Kingston Environment Forum - could hand out informative postcards? If that fails, then drivers could be warned and then fined, as in other boroughs.⁴⁷

6.4 Trial car-free Sundays in town centres: Kingston is always very pleasant when roads are closed for the Prudential bike event and Kingston Carnival. Whilst car-free days do not materially affect overall air pollution, it is likely that such a measure would raise the profile of air quality in Kingston and remind people that there are other, more sustainable, ways to travel.⁴⁸

6.5 Encourage cycling and walking: Discourage short car journeys, e.g. to local shops, local schools, and do everything possible to make cycling and walking safe and pleasant, e.g. by speedily implementing a network of joined-up, quiet, segregated cycle routes.

6.6 Join Love Clean Air: We hope that Kingston Council does decide to join this useful-sounding South London councils' cluster group on air quality.

6.7 Use citizen scientists: Help and support interested local groups, schools and residents, to monitor air pollution in their roads and neighbourhoods.

6.8 Encourage low emission vehicles: Provide plenty of charging points, incentivise LE delivery vans and lorries to residents and to shops, and persuade TfL to move to LE buses in the suburbs as quickly as possible.



We want some of these, please.

6.9 Communicate: Use RBK communications department and local media contacts, community notice boards, bus stops and station information boards,⁴⁹ community groups and meetings, etc.. to promote air pollution information and the behaviour changes that would contribute to improved air quality, such as: domestic and business energy-efficiency measures (some costing nothing, for example, shops closing their doors in winter, businesses and schools and the Council turning off unnecessary lights and computers...); promoting trees and other greenery; boosting clean public transport, cycling and walking, emphasising that everyone, especially children but also drivers, benefits.

6.10 Bring Council departments together: Council departments and councillors with responsibility for the many relevant areas - cycling and other sustainable transport, planning, public health, air quality, energy efficiency, green spaces - should be working together to improve Kingston's air quality. Air pollution affects everyone, and worries about it may be a good way to gather support for changes that otherwise could be unpopular, such as parking and speed restrictions, cycle routes, more trees.



On the left: Human Sensor - hi- tech illuminated costumes reveal changes in urban air pollution in Manchester - <http://humansensor.eu> Should we invite the Human Sensor to visit Kingston?

7. FURTHER READING

Air pollution stories in the media

From *The Independent*, April 2014 evidence that pollution is a factor in deaths from respiratory disease - <http://www.independent.co.uk/life-style/health-and-families/health-news/air-pollution-reduces-life-expectancy-by-six-months-for-every-briton-9251260.html>

How Paris is stepping up its drive against the car, *BBC news magazine*, 2/5/16 - <http://www.bbc.co.uk/news/magazine-36169815>

New mayor of London calls air pollution 'our biggest environmental challenge' and plans to bring the increased ultra-low emission zone into force early - <http://www.theguardian.com/environment/2016/may/13/sadiq-khan-to-double-size-londons-clean-air-zone-pollution>

Evening Standard on London air pollution, including: <http://www.standard.co.uk/news/politics/use-road-taxes-to-tackle-londons-filthy-air-says-london-mayor-sadiq-khan-a3269986.html>

<http://www.standard.co.uk/comment/comment/simon-birkett-mayor-sadiq-khan-must-act-on-his-pledge-to-clean-up-london-s-filthy-air-a3289146.html>

<http://www.standard.co.uk/news/london/toxic-air-warnings-to-be-displayed-at-tube-stations-and-bus-stops-during-pollution-peaks-a3311891.html>

Washington Post: "About 11 million cars were designed to cheat air pollution tests. Last September Volkswagen was caught using sophisticated software programmes to cheat emissions tests." - https://www.washingtonpost.com/business/economy/vw-emissions-cheating-affects-11-million-cars-worldwide/2015/09/22/30f59bca-6126-11e5-9757-e49273f05f65_story.html

Also reported in *The Guardian*, May 2016 -

<http://www.theguardian.com/business/2016/apr/21/all-top-selling-cars-break-emissions-limits-in-real-world-tests>

Cars made before 2005 may have to pay extra London 'air pollution charge, *BBC News*, 5 July 2016 - <http://www.bbc.co.uk/news/uk-england-london-36712220>

More Air Quality information and data

DEFRA National Air Quality Objectives - http://uk-air.defra.gov.uk/assets/documents/National_air_quality_objectives.pdf

Richmond Heathrow Campaign, Heathrow Expansion Factsheet 4 on Air Quality - <http://rhcfacts.org/air/>

TfL on environment and clean air - <https://tfl.gov.uk/corporate/about-tfl/corporate-and-social-responsibility/environment?cid=transport-emissions>

Plume - facts on air and apps - <http://facts.plumelabs.com/>

LSx Cleaner Air 4 Communities Project (July 2013 - June 2015)

<http://www.lsx.org.uk/docs/page/3643/LSx%20CA4C%20Final%20report%20Nov%202015.pdf>

and Action Planning Toolkit -

<http://www.lsx.org.uk/docs/page/2791/Action%20planning%20toolkit%2020022014.pdf>

Kew Residents' Association presentation on local air pollution, May 2105 - [http://e-](http://e-voice.org.uk/kef/assets/other/kra-presentation-may-2016)

[voice.org.uk/kef/assets/other/kra-presentation-may-2016](http://e-voice.org.uk/kef/assets/other/kra-presentation-may-2016)

Air Quality News - <http://www.airqualitynews.com/>

City of London documents on AQ - <http://www.cityoflondon.gov.uk/business/environmental-health/environmental-protection/air-quality/Pages/city-air.aspx> - and AQ strategy - [http://e-](http://e-voice.org.uk/kef/assets/other/city-of-london-aq-strategy)

[voice.org.uk/kef/assets/other/city-of-london-aq-strategy](http://e-voice.org.uk/kef/assets/other/city-of-london-aq-strategy)

Analysing Air Pollution Exposure in London - 2013 report to GLA -

https://www.london.gov.uk/sites/default/files/analysing_air_pollution_exposure_in_london_-_technical_report_-_2013.pdf

App to show low pollution routes in London - <http://cityairapp.com/>

Car emissions types and impacts - <http://www.nextgreencar.com/emissions/types-impact/#3>

Air Quality Information for Public Health Professionals – London Borough of Kingston upon Thames, Greater London Authority September 2013 -

https://www.london.gov.uk/sites/default/files/air_quality_for_public_health_professionals_-_rb_kingston_upon_thames.pdf

Other Air Quality campaigns

Breathe Better Together, "A new campaign to encourage us, as Londoners, to improve the quality of the air we breathe" - <http://www.cleanerairforlondon.org.uk/projects-campaigns/breathe-better-together>

Friends of the Earth - <https://www.foe.co.uk/green-blog/shocking-air-pollution-facts-5-unbelievable>

Love Clean Air: The 'South London Cluster Group' of Bromley, Croydon, Merton, Lewisham, Richmond, Sutton, and Wandsworth councils working together to promote air quality in the region - <http://lovecleanair.org/>

Make Air Safe & Clean (MASC) - <https://www.facebook.com/groups/MakeAirSafeClean/> - a community of S W London residents and local environmental groups working to improve the quality of the air we breathe.

8. REFERENCES

- ¹ Royal College of Physicians on health impacts of air pollution:
www.rcplondon.ac.uk/news/doctors-say-40000-deaths-year-linked-air-pollution;
www.rcplondon.ac.uk/projects/outputs/every-breath-we-take-lifelong-impact-air-pollution;
www.rcplondon.ac.uk/news/rcp-calls-eu-action-air-pollution;
www.rcplondon.ac.uk/projects/outputs/every-breath-we-take-lifelong-impact-air-pollution
- ² From The Guardian, 30/8/16 - "Air quality shows little improvement..."
<https://www.theguardian.com/environment/2016/aug/30/uk-air-quality-shows-little-improvement-past-20-years-says-study>
- ³ www.theguardian.com/environment/2016/feb/05/the-truth-about-londons-air-pollution
- ⁴ "Air pollution linked to increased mental illness in children. New research is first to establish the link and builds on other evidence that children are particularly vulnerable to even low levels of pollution" *The Guardian*, 13/6/16, www.theguardian.com/environment/2016/jun/13/air-pollution-linked-to-increased-mental-illness-in-children
- ⁵ "Air pollution could increase risk of stillbirth, study suggests. Exposure to vehicular and industrial emissions heightens risk during pregnancy, researchers say." *The Guardian*, 24/5/16, www.theguardian.com/environment/2016/may/24/air-pollution-could-increase-risk-of-stillbirth-study-suggests#img-1
- ⁶ KRA presentation, July 2016 - <http://e-voice.org.uk/kef/assets/other/kra-presentation-may-2016>
- ⁷ Health risks from AQ inside cars:
www.airqualitynews.com/2016/02/16/higher-air-pollution-health-risk-inside-car-study-finds/;
www.bbc.co.uk/news/health-35504768; <http://road.cc/content/news/129814-testing-mps-reveals-worst-air-pollution-inside-cars>
- ⁸ "...in London – people would need to cycle over five hours per week before the pollution risks outweigh the health benefits," *Financial Times*, 2/9/16 - <https://ig.ft.com/sites/urban-cycling/>
- ⁹ www.theguardian.com/environment/2016/feb/05/the-truth-about-londons-air-pollution
In August 2014 the Healthy Air Campaign teamed up with King's College London, Camden Council and London cyclist, Vivienne Westwood, to see what travel options are the healthiest - www.healthyair.org.uk/healthiest-transport-option-video/
See also <http://www.airqualitynews.com/2016/02/16/higher-air-pollution-health-risk-inside-car-study-finds/> and <http://www.airqualitynews.com/2015/02/16/air-pollution-dangerously-high-for-drivers-at-red-lights/>
And BBC News, Feb 2016: Drivers 'exposed to highest levels of pollution' - <http://www.bbc.co.uk/news/health-35504768>
- ¹⁰ Air Quality Information for Public Health Professionals – London Borough of Kingston upon Thames, Greater London Authority September 2013 - https://www.london.gov.uk/sites/default/files/air_quality_for_public_health_professionals_-_rb_kingston_upon_thames.pdf
- ¹¹ <https://www.theguardian.com/environment/2016/sep/05/toxic-air-pollution-particles-found-in-human-brains-links-alzheimers> and <http://www.bbc.co.uk/news/science-environment-37276219>
- ¹² 'The most compelling link yet found between high levels of traffic pollution and premature ageing of the skin has been reported in an "alarming" new study.' *Evening Standard*, 13/6/16 - <http://www.standard.co.uk/news/london/toxic-diesel-fumes-cause-people-to-develop-liver-spots-on-their-faces-a3270046.html> and <https://www.theguardian.com/environment/2016/jul/15/air-pollution-causes-wrinkles-and-premature-ageing-new-research-shows>

-
- ¹³ <https://www.foe.co.uk/green-blog/shocking-air-pollution-facts-5-unbelievable>
- ¹⁴ <http://www.theguardian.com/environment/2016/may/13/sadiq-khan-to-double-size-londons-clean-air-zone-pollution> and <http://www.standard.co.uk/news/politics/use-road-taxes-to-tackle-londons-filthy-air-says-london-mayor-sadiq-khan-a3269986.html>
- ¹⁵ <https://www.theguardian.com/uk-news/davehillblog/2016/jul/28/how-bold-will-sadiq-khans-air-quality-improvement-programme-be>
- ¹⁶ <http://www.ippr.org/publications/lethal-and-illegal-londons-air-pollution-crisis>
- ¹⁷ <http://cleanair.london/>
- ¹⁸ <http://www.independent.co.uk/environment/climate-change/london-parks-air-pollution-illegal-levels-dangerous-health-hyde-park-regents-park-a7183001.html>
- ¹⁹ <http://talklondon.london.gov.uk/blogs/talk-london-team/results-clean-air-consultation>
- ²⁰ <http://www.bbc.co.uk/news/health-35504768>
- ²¹ From RBK's Air Quality Action Plan - despite being approved in June 2016, the AQAP does not appear to be accessible to the public on Kingston Council website.
- ²² <http://e-voice.org.uk/kef/assets/other/rbk-aq-monitoring-data-2014-1>
- ²³ www.londonair.org.uk/LondonAir/Default.aspx
- ²⁴ See RBK's Air Quality Action Plan - despite being approved in June 2016, the AQAP does not appear to be accessible to the public on Kingston Council website.
- ²⁵ <https://www.theguardian.com/environment/2016/jul/01/children-at-nearly-90-london-secondary-schools-exposed-to-dangerous-air-pollution>
- ²⁶ Direction of Travel for the Royal Borough of Kingston upon Thames consultation draft, June 2016, <http://kingston.objective.co.uk/file/4037082>
- ²⁷ From RBK's Go Cycle programme - https://www.kingston.gov.uk/info/200382/go/1258/go_developments
- ²⁸ RBK's Air Quality Action Plan - despite being approved in June 2016, the AQAP does not appear to be accessible to the public on Kingston Council website.
- ²⁹ Source *Nottinghamshire in Focus*, July 2016
- ³⁰ <http://www.standard.co.uk/news/london/london-buses-crawling-in-slow-traffic-blamed-for-pollution-increase-a3261876.html>
- ³¹ <https://tfl.gov.uk/modes/driving/ultra-low-emission-zone>
- ³² 20's Plenty for Us - <http://www.20splenty.org/> - a not for profit organisation campaigning for 20mph to become the default speed limit on residential and urban streets; 300 local campaigns around the country and many of our most iconic cities in the UK have already adopted a 20mph limit for most of their streets.
- ³³ From RBK's Go Cycle programme - https://www.kingston.gov.uk/info/200382/go/1258/go_developments
- ³⁴ "...in London – people would need to cycle over five hours per week before the pollution risks outweigh the health benefits," *Financial Times*, 2/9/16 - <https://ig.ft.com/sites/urban-cycling/>
- ³⁵ <http://www.bbc.co.uk/news/uk-england-london-36791485>
- ³⁶ Direction of Travel for the Royal Borough of Kingston upon Thames consultation draft, June 2016, <http://kingston.objective.co.uk/file/4037082>
- ³⁷ In a BBC programme doctors Michael Mosley and Gabriel Weston helped test a new pollution filter developed by Professor Barbara Maher at the University of Lancaster: silver birch trees. They showed that quite small trees can reduce the amount of pollution in homes on a busy road. www.bbc.co.uk/programmes/articles/1m0KyIS04ZqwswP5Q8MQQq/the-big-air-pollution-experiment
- 2011 research by scientists at the University of Southampton has shown how London's trees can improve air quality by filtering out damaging particulates www.southampton.ac.uk/mediacentre/news/2011/oct/11_96.shtml

³⁸ <http://www.thetimes.co.uk/tto/environment/article4516350.ece>

³⁹ <http://www.ltoa.org.uk/news/278-an-ltoa-response-to-avenues-of-trees-raise-risk-of-air-pollution->

⁴⁰ See also FoE's "How to avoid toxic fumes from transport", www.foe.co.uk/green-blog/how-avoid-toxic-fumes-from-transport

⁴¹ <http://lovecleanair.org/>

⁴² Exercise benefits you - even in polluted city air" NHS Choices, May 2015 - www.nhs.uk/news/2016/05May/Pages/exercise-benefits-despite-pollution.aspx

⁴³ AirText is a free service and can be joined at www.airtext.info

⁴⁴ See for example the collection of information on Greener Kingston's website at <http://e-voice.org.uk/greenerkingston/living-landscapes/we-need-trees/>

⁴⁵ "Brexit May Turn London's Fog to Smog If U.K. Ditches EU Rules" Bloomberg, 3/8/16 - <http://www.bloomberg.com/news/articles/2016-08-03/brexit-may-turn-london-s-fog-to-smog-if-u-k-ditches-eu-rules>

⁴⁶ http://www.surreycomet.co.uk/news/14679361.Leaders_of_11_London_councils_write_to_Prime_Minister_Teresa_May_urging_her_to_back_Gatwick_expansion_over_Heathrow/

⁴⁷ Motorists in Westminster who sit in a stationary car with the engine running and refuse to turn it off are to be fined £20, BBC News, March 2015 - <http://www.bbc.co.uk/news/uk-england-london-31989916>

⁴⁸ <http://1010uk.org/articles/cities-kicking-cars-to-curb>

⁴⁹ Mayor Sadiq Khan announces that air pollution warnings are to be shown at London tube stations and bus stops, Evening Standard, 4/8/16 - <http://www.standard.co.uk/news/london/toxic-air-warnings-to-be-displayed-at-tube-stations-and-bus-stops-during-pollution-peaks-a3311891.html>