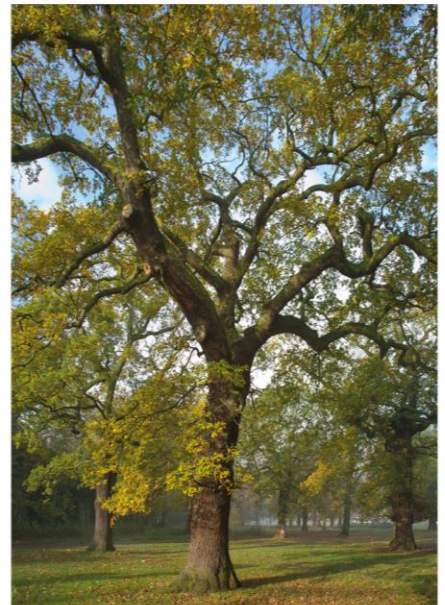


RESPONSE TO THE MAYOR'S DRAFT ENVIRONMENT STRATEGY



From Caroline Russell AM
Green Party Member of the London Assembly
November 2017



SEVERE WEATHER WARNING: MAYOR MUST FUTURE PROOF LONDON

Tackling climate change is the defining challenge of our time. London should be at the forefront of change but the Mayor's environment strategy falls short of the action needed to meet our Paris climate change commitments.

London is not ready for an extreme weather event. It's at serious risk of floods from heavy rainfall, heatwaves and water shortages. Climate disruption around the world also puts our complex food chains at risk. We need a resilient city that can weather these storms.

While the strategy acknowledges these risks, it's targets and programmes don't even come close to the preventative action that is needed now and over the next decade to protect Londoners, wildlife and biodiversity.

The Mayor must not miss the chance to show London's leadership, as a global city, in confronting the problems faced by densely populated cities, not only mitigating climate risks but solving the emerging public health emergency caused by our polluted air.

Londoners have a right to breathe clean air wherever they live and be free of noise that is damaging to their health. The Mayor's current proposals are too focused on central London, they are too little and late. However, I am glad the Mayor has taken up my recommendation for establishing a particulate matter (PM 2.5) target based on World Health Organisation guidelines. This needs to be applied to his Ultra Low Emission Zone.



Apart from ensuring that traffic is reduced to cut air pollution, the Mayor cannot undermine his own policies by backing new sources of pollution like Silvertown Tunnel.

The target of meeting 15 per cent of energy demand with renewable and community energy by 2030 is lacklustre. This doesn't even come close to the scale of ambition required.

The Mayor needs to set up Energy for Londoners as a fully-licensed energy supply company. Opting for a white label company is a huge mistake. It will not provide the independence to set tariffs or the resources to invest in energy sector jobs and renewable energy to cut fuel poverty.

The Mayor's decision to clear the way for expansion at City Airport and support for more flights at Gatwick is reckless. The Mayor should invite his C40 counterparts to join him in a call to suspend all aviation expansion. This will show true climate change leadership.

Caroline Russell AM
17 November 2017

LONDONERS NEED A HEALTHY ENVIRONMENT

Londoners have a right to breathe clean air wherever they live and be free of noise that is damaging to their health.

London's dirty air is a public health emergency with almost 9,000 people dying early each year from long term exposure to diesel vehicle emissions. The two contributing pollutants of concern are particulate matter (PM₁₀, PM_{2.5}) and nitrogen dioxide (NO₂).

The second largest environment health risk after air pollution is noise. Almost 2.4 million people are exposed to road traffic noise above World Health Organisation (WHO) guidelines (55dB); 525,000 by rail noise and; 827,000 by aviation noise from the six airports serving London¹.

AIR POLLUTION

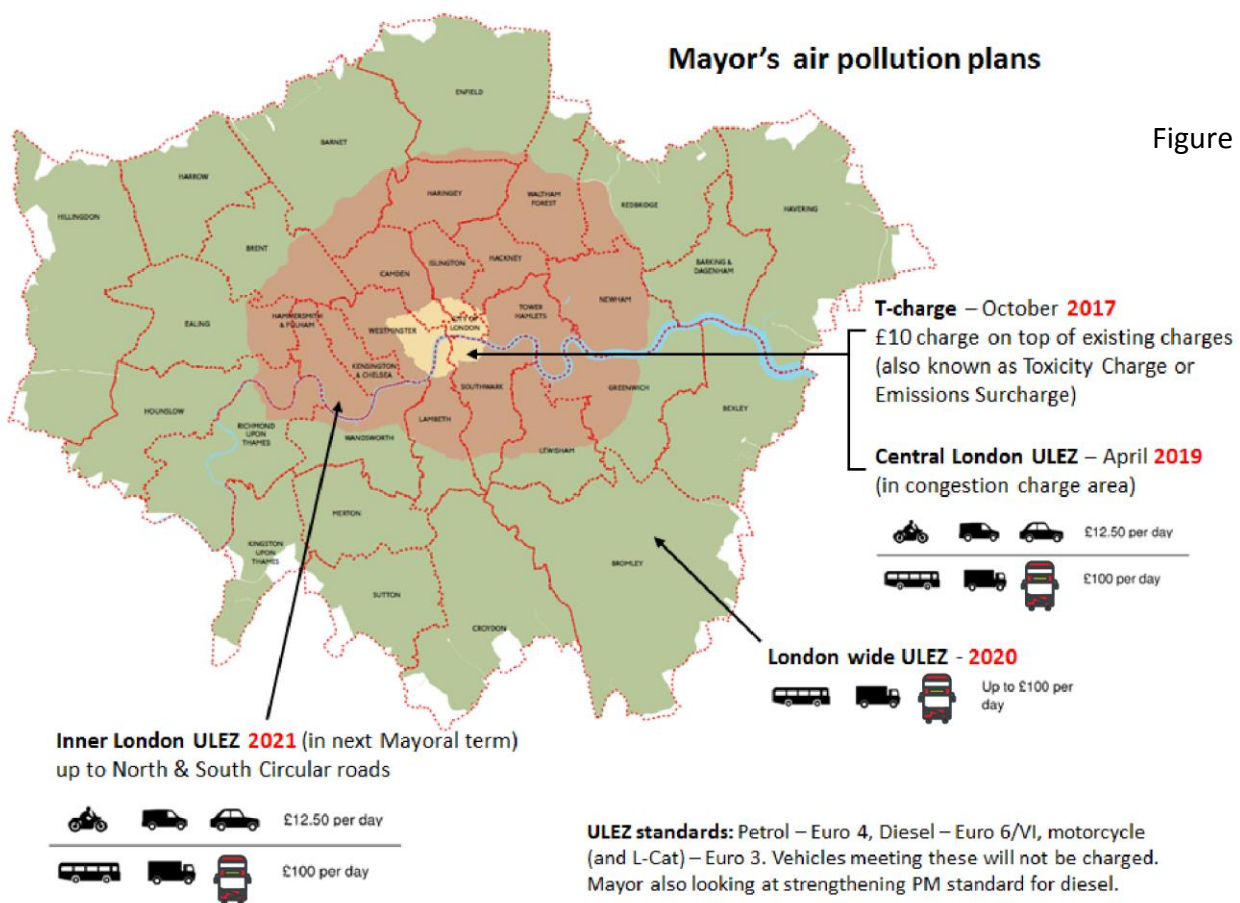
Londoners are increasingly aware that the air they breathe is bad for their health. Many of them have been measuring local air pollution and are shocked to discover the scale of the problem London faces. The Mayor has plans to fix this, but what he is doing is too little and too late.

Outer London

Under the Mayor's air pollution plans (Figure 1) the Ultra Low Emission Zone (ULEZ), will apply to the oldest most polluting vehicles inside the current congestion charge zone. He does not plan to expand the ULEZ until 2021 and then only as far as the North and South circular.

Mayor's air pollution plans

Figure 1



The Mayor's plans are too focused on central London leaving many Londoners left out. He should aim for the whole of London to achieve full compliance with legal air pollution limits as soon as possible and by 2020 at the latest for Nitrogen Dioxide.

This means consulting on:

- a London-wide Ultra Low Emission Zone (ULEZ) for all vehicles now
- and for all phases of the Mayor's ULEZ plans to be completed within this term of office

Designing out car use will become increasingly relevant. The Campaign for the Protection of Rural England (CPRE)ⁱⁱ have published research showing that extensive low-density housing development in areas just outside London are set to add one million new car journeys a week on outer London roads that are already struggling to cope. So, public transport investment will be needed along with planning for fewer cars.

Too many new cars are still emitting dangerous levels of pollution on the road. I welcome the Mayor's 'cleaner vehicles checker'ⁱⁱⁱ scheme which provides Londoners with independent on-road emissions information for all new vehicles. This is a useful tool to raise awareness about the actual pollution coming from different models of car and should encourage people to choose the least health damaging vehicles.

The most dangerous particles

As I revealed in my report *Left Out Londoners*^{iv}, the Mayor's plans will still leave all of London's residents exposed to microscopic airborne particles that are very damaging to our health.

I am glad the Mayor has taken up my recommendation for establishing a particulate matter (PM 2.5) target based on World Health Organisation guidelines. However, he should apply this standard to his ULEZ

sooner than 2030 as evidence^v shows there are no safe PM exposure levels

The Mayor's aim of working with industry to seek technological solutions is important, however the best solution is to avoid producing PM_{2.5} pollution in the first place. Even full electrification of buses and motorised transport won't solve the PM_{2.5} problem, because half of the transport related PM_{2.5} pollution comes from tyre and brake wear.

This is why the Mayor's plans to cut car use and get as many people using public transport or walking and cycling are so important. To deliver on this he must massively improve public transport and the conditions for people wanting to walk and cycle, especially in outer London.

Help schools and communities to understand and cut pollution

The Mayor is carrying out air quality audits^{vi} for 50 primary schools in the most polluted areas in London to identify measures to lower children's exposure. However, there are 466 schools where levels of Nitrogen Dioxide threaten children health. They all need audits^{vii}.

The Mayor's proposal to safeguard and enhance the existing air quality monitoring network and to help boroughs and groups to understand the pollution in their area is constructive. It's really important that there is transparency about NO₂ and PM_{2.5} pollution levels so that communities, businesses and boroughs understand the scale of the problem and the urgent need to clean up our air.

New projects – new pollution?

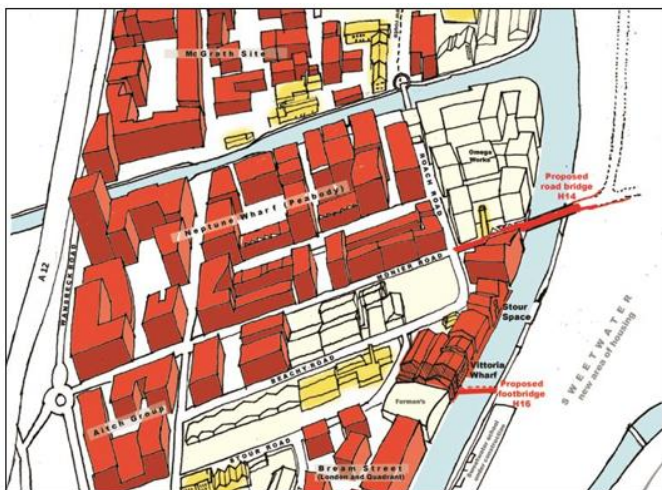
Projects initiated or supported by the Mayor must not worsen air pollution. The following paragraphs include examples.

The Assembly's Environment Committee criticised^{viii} the Government for using the 'zonal compliance' argument for Heathrow expansion



on the basis that it is legal so long as the increased pollution does not exceed the worst pollution in the whole of Greater London. It's wrong that the Mayor is not applying the same logic to the proposed Silvertown Tunnel or expansion at City Airport. Neither of these projects should go ahead as they will worsen air pollution and people's exposure to it.

Along with Save Hackney Wick^{ix} campaigners, I have been lobbying the Mayor to drop his proposal to make the footbridge at Monier Road into the H16 road bridge. This would create a polluting rat-run connecting the Olympic Park to the busy A12 across a quiet low traffic neighbourhood on Fish Island, undermining his own draft Transport Strategy and air pollution policies.



Map @Lucinda Rogers / Save Hackney Wick

The draft Strategy says that the Mayor will consider policies to reduce the air pollution impact of new waste sites. It should be clear that legal action will be taken against any air pollution breaches from energy from waste incineration.

New powers

I support the Mayor's calls to the Government for powers over river and construction emissions, solid fuel and wood burning stoves

and for Government action such as a new Clean Air Act and Vehicle Excise Duty reform.

I also support a national diesel scrappage scheme for small businesses to support a switch to electric vehicles and cargo bikes. Any scrappage scheme should be used to incentivise people to ditch their diesel vehicles and switch to public transport walking and cycling instead.^x

NOISE

Environmental noise is recognised by the World Health Organisation as the second largest environmental health risk after air pollution. The most common effects are annoyance and sleep disturbance. Prolonged exposure causes a range of problems including cardiovascular and mental health effects and hearing loss^{xi}.

For too long excessive noise has been accepted as the necessary cost of living in a busy city. The Mayor must do everything in his powers to reduce this impact.

Airports

A third runway at Heathrow will expose another 200,000 people to significant noise. While the Strategy says that the "Mayor will oppose the expansion of Heathrow Airport" it adds "unless it can be shown that no new noise harm will result and the benefits of future regulatory and technological improvements would be fairly shared with affected communities". This caveat introduces ambiguity and it should be dropped. No expansion at Heathrow should mean no expansion.

The Strategy does not include the number of Londoners who will be affected by the expansion plans at London City Airport, or the numbers impacted by concentrated flight paths. This should be included in the final strategy.



While the Mayor opposes any expansion in commercial flights at RAF Northolt^{xii}, he should go further and support the 'Stop Northolt'^{xiii} campaign to end all commercial flights at this military airport.



The Strategy should also include an objective of protecting Londoners from any new or additional noise exposure from aircraft and helicopters. The proposal^{xiv} to set up an independent noise regulator to review evidence and act on behalf of residents affected by aviation and other sources of noise should help with this.

Traffic

Night deliveries can make our streets safer by removing dangerous lorries from use in daytime. The Mayor needs specific policies for noise mitigation and preventing residential disturbance from loading and unloading.

Traffic noise in parks

The Strategy should acknowledge that many of London's parks and green spaces are surrounded by heavily trafficked main roads. The Mayor should work with boroughs and Transport for London (TfL) to identify the ten worst affected parks by 2020, as proposed by the Campaign for the Protection of Rural England (CPRE)^{xv}, with measures such as street closure and traffic re-routing or mitigation measures such as hedges, trees and other natural barriers.

Tube noise

I receive a lot of complaints from residents about disturbance from the Night Tube and people entering and exiting tube stations in the small hours. In serious cases, the negative health impact has driven people out of their homes. The Strategy says the Mayor will work with Transport for London (TfL) to monitor and manage noise impacts of tube and rail services, especially the Night Tube. The Mayor must ensure that all sources of track noise are resolved urgently, and before any further expansion happens.

Mayoral noise complaint one-stop-shop

The Mayor should provide a one-stop-shop advice service to help Londoners with noise issues. Advising them on the appropriate course of action on their specific issues and sign posting to relevant bodies and authorities who can provide support.



A RESILIENT CITY SHOULD BE AT THE HEART OF ENVIRONMENT STRATEGY

Climate change is threatening Londoners, their livelihoods, water supplies and essential transport and energy infrastructure.

London has been lucky to escape the worst effects of climate change such as the extreme flooding experienced in other parts of the UK in recent years. Other changes such as droughts, or five to six degrees centigrade temperature rises will increase heat related deaths, create overheating in our homes and workplaces and disrupt our transport unless preventative action is taken now.

London's parks, rivers, canals and other green spaces are important for Londoner's mental and physical wellbeing as our city accommodates a rising population and adjusts to a changing climate. Green spaces need to be protected, expanded and connected and their quality improved. This is particularly important as national trends are seeing very disturbing declines in biodiversity and devastating species and insect loss^{xvi}.

London's dependence on complex global supply chains, as set out in the Assembly's 'Weathering the Storm' report^{xvii}, makes our economy and food supplies particularly vulnerable to climate change events around the world. This means that the Strategy should have specific policies to shore up London's food security and assist the development of a resilient circular economy.

The London Plan offers a chance to put the natural environment and biodiversity at the heart of his London Plan. The Mayor can lead by example on his housing developments and Mayoral Development Corporation land.

USE NATURAL RESOURCES TO PROTECT LONDONERS AND WILDLIFE

London's natural resources can play a huge part in making London resilient to flooding, heatwaves and drought. I welcome the Strategy's commitment to making London a National Park City and using an 'adaptive pathways' approach to developing large scale infrastructure "which allow for flexibility in decision-making so that we don't cut off options for the future"^{xviii}.

However, London is not ready for an extreme weather event. The Strategy's absence of targets and actions in the short and medium term do not match the threats it faces. Residents and businesses are vulnerable to the impacts of a changing climate and more severe rainfall, droughts and heatwaves. The strategy must address the scale of the threats we face.

Managing flood risk

Given the importance of Sustainable Urban Drainage (SUDS) in storing and managing extreme rainfall, the Mayor must go further than policies that simply "encourage green infrastructure sustainable drainage systems where possible"^{xix}. His London Plan policies should require maximum SUDS in all new developments to limit surface water run-off.

I support the Strategy's river catchment approach to reducing flood risks with nature based interventions to reduce risks of flooding downstream or in built up central London areas. The Mayor needs to go further and identify strategic locations in upper river catchments for his commitment to plant 2000



hectares of woodland in the urban fringe. This would help to slow the rate of flow into rivers.

There is no target for river restoration. Given the enormous flood mitigation, wildlife and well-being benefits to local people of restoring hidden rivers or those channelled in concrete walls, the Mayor should have a target to restore and rewild at least 50 kilometers^{xx} of rivers to provide London with better protection from flooding, with an interim target of 20km by 2025.

Where utility companies' extreme weather resilience plans or allocated resources are inadequate, the Mayor should seek powers^{xxi} to recover costs incurred by London's emergency services protecting critical infrastructure during these events. This was a recommendation that the former London Fire Brigade commissioner Ron Dobson, raised when I asked him about the Kenley water treatment works supplying 50,000 homes in Croydon that were threatened during prolonged rainfall^{xxii}.

Keeping London cool

It's disappointing that the Strategy's tree cover target has been reduced to 22 per cent from the previous administration's 25 per cent. As is the weak target to increase London's green space by three per cent from 47 to 50 per cent by 2050

There are no street tree planting targets. The Mayor should be planning on the scale of 'Million Trees New York city'^{xxiii}. A model where 100,000 trees were planted each year over a ten-year period.

The Strategy should identify areas where the Mayor's major tree programmes will have the most benefit. For instance, in central London locations where residents and businesses need far more tree canopy cover for natural shading, cooling and the natural air conditioning it provides during heatwaves. Species selection

should ensure they are adapted to drought conditions.

London's stock of ancient, veteran and large canopy broadleaf trees is being depleted at a frightening rate. Recently mature trees in Hillingdon have been cut down to enable HS2 and health and safety has been cited as the reason for losing fifty mature horse chestnut trees on Tooting Bec Common [Figure 2]. Mature trees are also lost as a result of council cost-cutting and insurance claims. These trees need protecting. The Mayor should insist councils and developers value trees properly by commissioning Capital Asset Value for Amenity Trees (CAVEAT)^{xxiv} and i-Tree^{xxv} surveys to capture the full benefits.

Tooting Bec Common

Wandsworth Council chopped down 50 chestnut trees that have been on Tooting Bec common for 150 years. According to Britain's leading tree assessor almost all were perfectly safe and were worth up to £187k each as public assets^{xxvi}.



Figure 2

The Strategy says that London will face a water supply gap of more than 100 million litres per day by 2020. The Mayor must ensure that a new strategic water resource for London is able to plug this gap and accommodate the long-term needs of a growing population. He must safeguard Londoners from any

disproportionate costs of this new infrastructure.

The Mayor needs to help Londoners reduce their water consumption. He is considering a planning requirement to limit water use to 105 litres of water per person per day in new build homes. This should be a minimum requirement^{xxvii}. He should look at what needs to be done to apply the same water-use standard to existing buildings where average consumption is 156 litres per person per day.

The Mayor must push Thames Water to speed up its mains replacement and rate of water meter installations and to identify leaks which result in 21% of London's water supply being lost.

The Strategy does not include figures on the number of London homes and businesses at high risks of surface water flooding or overheating. This should be set out with a route map for reducing or managing these risks.

Planning to protect people, wildlife and biodiversity

The planning process provides mechanisms for the Mayor to build resilience into the fabric of our city. Londoners need to know the Mayor will stand firm to protect our city's green spaces.

The Mayor says he will 'resist' development that results in loss of Green Belt and Metropolitan Open Land (MOL). This is too weak, as the Campaign to Protect Rural England (CPRE) highlighted in their 'The Strongest Protection' report^{xxviii}. The Mayor must maintain the strongest planning protection for these designations in the London Plan and tighten up the definition of 'very special circumstances' that is too often used to justify development.

Sites of Importance for Nature Conservation (SINCs) provide the core

framework necessary to conserve London's biodiversity. The Mayor should seek additional planning powers to make SINCs and Ancient Woodland referable applications.

The Strategy proposes to 'review and update' the All London Green Grid, a programme established at the GLA by the Green Party Group^{xxix}. The Mayor should deliver the sites identified in the subsequent Supplementary Guidance Implementation Framework to connect and expand green spaces around the city^{xxx}.

I support the Strategy's proposal for an Urban Greening Factor in the London Plan to increase the number of green roofs, green walls and sustainable drainage in new developments. However, the extent of measures should reflect predicted climate conditions, SUDS and biodiversity requirements and other criteria identified by the Campaign for the Protection of Rural England's Green Space Scorecard^{xxxi}.

The Mayor should require councils to show how they are delivering on his tree canopy cover targets and how their biodiversity plans are in conformity with the London Plan.

The Strategy identified that 45 per cent of London's is still within an Area of Deficiency to Public Open Space, where Londoners lack access to local or district parks. It is essential that the Mayor develops specific targets and programmes to address this lack of access to greenspace. This should include maximising the green on streets and in housing developments in both the public and private sector.

The Mayor must ensure that his London Plan retrofit policies and home insulation programmes take account of the impacts of heatwaves and flooding.



Keeping London fed

The Strategy fails to recognise the threats that climate change and Brexit poses to London's food security. Particularly as the complex global food supply chains, that London is heavily dependent on, can be disrupted by climate shocks abroad.

The Strategy and London Plan need policies to tackle food security, with more protection for urban communal growing spaces, high quality peri urban farm land and soil. The role of urban agriculture in tackling food security was investigated by the Assembly Planning Committee. The Mayor should take account of their report 'Cultivating the Capital'^{xxxii} in the work of the GLA's London Food Strategy.^{xxxiii}

Supporting community involvement

I support the Mayor's programme of offering community grants for creating small and medium scale greening projects, but there are no targets or details of funding to be able to comment.

The Strategy proposes to explore financial support for strategic green infrastructure projects from philanthropic funding. London has more multi-millionaires than any other city in the world and it is fair that they contribute. However, there should be careful safeguards to protect public access, use and ownership.

Too many front gardens are being paved over with few or no plants. This problem is exacerbated by ambiguous and complicated rules that are increasing the risk of local floods, and heat stress and the likelihood that wildlife will be driven out by lack of habitat.

The Strategy recognises the importance of front gardens, but fails to take a proactive role in helping Londoners to incorporate greenery for wildlife and cooling and to slow water runoff. The Mayor should set up a front garden advice website to influence Londoners' decisions.

TRANSFORMING OUR THROWAWAY SOCIETY

Londoners are consuming resources "as if there's no tomorrow" and creating a mountain of waste that is costing a fortune to dispose of.

Single-use plastic items and packaging blights our streets and harms our wildlife, the rivers and oceans. Once in our environment it takes centuries for plastic to break down, releasing toxic chemicals as it does so.

If we transform our attitude to waste and the use of throwaway products we could save money, reduce poverty and create new jobs as well as protecting our environment. The Mayor needs to play a major role in bringing about this necessary transformation.

Single-use packaging

Londoners are using thousands of disposable cups, bags and water bottles in our daily lives. For example, single-use plastic bottles account for 125,000 tonnes of plastic waste and 40 million hot drink cups in London each year.

The Strategy says that the Mayor "calls on food and drink businesses to offer incentives for their customers to use their own reusable cups and water bottles" and will support campaigns and initiatives to this end.

The Mayor needs to go much further. The 5p plastic bag charge showed that it's possible to successfully change consumer behaviour with a national policy.

The Mayor should:

- Make the case for a national deposit return scheme on all single use plastic water bottles, building on his request to Defra that London becomes a test bed for a national scheme^{xxxiv}.



- Make the case for a national charge on all disposable coffee cups. This is being investigated by the Government^{xxxv} and the Republic of Ireland^{xxxvi}.
- Engage with large coffee chains operating in London to drastically reduce the 40 million single use hot drink cups thrown away each year in London, replacing them with re-usable cups

The Strategy seeks to improve access to tap water and refill schemes. The Mayor should incorporate these at all major transport hubs, underground stations and other suitable locations. He could propose a design competition for water drinking fountains to create interest in the project.

Single-use products

The Mayor should carry out research on London's consumption of single-use plastic cups, cutlery and plates to build an evidence base for significant reductions.

He should also support the work of projects such as the Cup Effect and 'Period Positive'^{xxxvii} who are raising awareness of menstruation and single-use period products. Likewise he should promote Real Nappies^{xxxviii} and alternative incontinence products, actively promoting reusable options to reduce residual waste.

Recycling

Recycling rates have stagnated and many local authorities are wasting money sending recyclable waste to incineration and landfill^{xxxix}.

If waste authorities provided the best recycling and food waste collection services, they could be saving £107-£319 million^{xl}.

The Mayor needs to help all local authorities to play their part in delivering a less wasteful city and protect Londoners from the financial and pollution costs of unnecessary waste-disposal.

The current London Plan has a target to exceed 50 per cent of all local authority collected waste being recycled or composted by 2020. The Mayor is proposing to significantly water this down by delaying this to 2025. He should maintain the current target and put in place measures to ensure he achieves it.

The Mayor's proposals for setting a collective waste authority target, allows the boroughs with the worst record on recycling to continue to fail. Where boroughs show no significant improvements in meeting his targets, he should use his powers of direction to force serious action.

The lack of suitable storage space for recycling bins in older housing stock is understandable and needs creative action to make recycling the easiest option for residents. The lack of decent facilities for recycling, food waste and residual waste containers in newly built flats is unforgivable and makes the challenge of improving recycling rates in flats even harder. This must be addressed in the Strategy and in the London Plan that does not currently specify requirements for recycling provision in new build.

The Mayor could carry out an annual audit of recycling and composting for all London boroughs and publish the figures. This should include data on the proportion of food waste that is anaerobically digested, the density of housing, percentage of greenspace in the borough and the proportions of flats and kerbside properties.

The Mayor is proposing a minimum level of kerb-side recycling service to collect the six main materials with separate food waste collection by 2020 at the latest. I fully support this suggestion because it will help standardise recycling expectations across London and I would like to see it extended to include flats.



Burning more than ever

The Mayor's policies rightly prioritise reducing waste and re-using, composting and recycling materials. However, London is incinerating 46 per cent of its waste, an all-time-high^{xli}. This is a scandal and set to rise when Viridor, an energy for waste incinerator in Sutton^{xlii} with a 300,000 tonne annual capacity, becomes operational.

I support the Strategy's policy of making sure 'only truly residual waste is going for energy generation'. However, the Mayor needs to include a very clear definition of residual waste to prevent recyclable or compostable waste from being incinerated.

Food waste

Separate food waste collection can raise awareness about over-shopping and help people keep their food bills down. It also enables bin collection for recycling and residual waste to be less frequent as there is no decomposing matter in the black bag bin.

However, London still disposes of 1.5 – 1.75 million tonnes of food waste each year with a value of at least £2.55 billion.

The Mayor's target of reducing food waste by 20 per cent by 2025 does not go far enough. He should use his communication channels to encourage households to at least halve the estimated £700 of food waste they throw away

each year^{xliii} in line with the United Nations' sustainable development target^{xliv}.

The Strategy should specify that all unavoidable food waste is anaerobically digested. The Strategy acknowledges the benefits of Anaerobic Digestion for generating 100 percent renewable energy and this method could save £120m in disposal costs.

Creating jobs and businesses from reusing and recycling stuff

The circular economy ensures that natural resources stay in the economy for as long as possible. I welcome the Strategy's recognition of the importance of the low carbon and circular economy. The London Assembly Environment Committee estimated that it could create 12,000 new jobs by 2030, provide £7 billion net benefits to London's economy and put London on track to become carbon neutral^{xlv}.

The Mayor must provide detail on how he will support reuse and recycling businesses such as Bright Sparks that re-use and repair electrical goods, OLIO who redistribute surplus foods and Library of Things who supply tools and items to borrow to help with DIY jobs.

THE MAYOR NEEDS TO BE MORE AMBITIOUS TO MAKE LONDON A ZERO CARBON CITY

Tackling climate change is the defining challenge of our time. It will increasingly affect Londoners' daily lives, their jobs and their well-being. London is a global city and should be at the forefront of change, both in terms of the Mayor showing leadership and his actions to keep Londoners safe from climate change.

The Mayor's Strategy does not reflect the urgency of the Paris Climate Change agreement and scale of action that is needed now and over the next decade to limit global warming to one and a half degrees centigrade.

REDUCING CARBON EMISSIONS AND ENERGY USE

It's extremely disappointing that the Mayor appears to be focusing on the headline grabbing zero carbon target by 2050, instead of putting all his influence and resources on delivery during his current term of office, or setting firm foundations for the next decade.

The Mayor expects carbon emission reductions of only around 52 per cent by 2025, compared to the 60 per cent target of his predecessor. This does not show global leadership.

We can't keep flying like there's no tomorrow

The Mayor's decision to clear the way for expansion at City Airport and give support for more flights at Gatwick is reckless. Pumping millions of tonnes of carbon into the atmosphere, will compromise London's contribution to the Paris Climate Change agreement. Failing to tackle climate change and make London resilient to extreme

weather will ultimately damage the foundations of London's economy as increasing resources will be spent dealing with the consequences.

As an alternative to aviation expansion, the Mayor should advocate a frequent flyer levy^{xlvi}. This does not affect people going away once a year on their annual holiday or visiting family or friends, but charges frequent flyers on their mostly short haul flights.

The Mayor should invite his C40 counterparts to join him in a call to suspend all aviation expansion, the most carbon intensive form of transport. This would show real climate change leadership.

Zero carbon homes

I welcome the Mayor's commitment to maintain the zero carbon homes requirement for new homes and all other new buildings from 2019.

The Strategy refers to climate positive buildings that generate more clean energy than they consume. The Mayor needs to pilot this urgently and once established, set this as a standard for all future developments in London.

I welcome the Mayor's intention of using the zero carbon homes policy offset fund for investment in renewables, energy efficiency and tackling fuel poverty. However, the Mayor must make it harder for developers to avoid installing on site renewables by using this fund.

Keeping warm at home

The Strategy says that 100,000 homes will need to be retrofitted with energy efficiency improvements and renewable energy



technologies each year to meet the target of zero emissions by 2050.

The reference in the Strategy to 'any remaining residual emissions offset' should not be a substitute for ineffective or small scale retrofit programmes and pilots that make little difference.

The Mayor must rapidly develop insulation and retrofit programmes that are attractive to residents and businesses, affordable and scalable. Getting this right is an absolute priority. Given the enormity of the challenge, it's extremely disappointing that there is very little detail on how this will be achieved.

For the owner occupier, able to pay sector, the Mayor must develop an attractive, easy to access programme with zero percent or very low interest loans.

The Mayor needs to pilot these, along with Energy Leap to retrofit homes to a net zero energy standard. In the Netherlands 111,000 homes are due to be refurbished to this Energiesprong^{xlvii} standard.

The Mayor needs to push the Government hard on the successor to its failed Green Deal so that in parallel with the Mayor's own domestic insulation programmes, large scale home insulation and energy efficiency measures will be rolled out across London^{xlviii}.

As an interim target towards the Mayor's zero carbon buildings in 2050, the Association for the Conservation of Energy recommends, a minimum standard of EPC band C for fuel poor homes, private rented sector homes, social rented homes, and all remaining properties.

Fossil free pensions and investments

I have asked the Mayor to divest the London Pension Fund Authority of its remaining

investments in fossil-fuel industries and to confirm that companies on the Top 200 Fossil

Fuel Companies list^{xlix}, such as Shell, BP and Exxon, are permanently excluded from active and passive investments. The Mayor should also adopt Divest London's recommendations to go fossil free^l

Climate friendly eating

The GLA report 'London's food sector greenhouse gases' quantified the contribution of London's food sector to the capital's greenhouse gas emissions^{li}. The Strategy should take account of its findings in its policies to cut the carbon footprint of food in London especially that procured by the GLA group.

Sustain, the alliance for better food and farming identified this gap in the strategy saying "shockingly there is no recognition in the strategy of the huge contribution of food and farming towards greenhouse gas emissions"^{lii}.

The Strategy should advocate local, seasonal, organic and low meat, vegetarian and vegan menus.

ENERGY

The Strategy fails to set clear policies and targets to achieve substantial decarbonization of our energy systems either in the short term or to 2030.

An ambitious city like London should be at the forefront of pushing to meet, at the very least, the EU renewable energy target of 20 per cent of our energy coming from renewable sources by 2020.

The target of meeting 15 per cent of energy demand with renewable and community energy by 2030 is lacklustre. This doesn't even come close to the scale of ambition required. With 11 EU member states already achieving

their 2020 targets^{liii} London should be leading the way, not lagging even further behind.

The Mayor should use his powers and Transport for London's enormous procurement power to decarbonise the energy grid rapidly and support renewable and community energy in line with the EU target.

Energy for Londoners

The Green Party Group on the Assembly has lobbied the Mayor and his predecessor^{liv}, along with Switched on London^{lv} and community energy organisations to set up a Mayoral energy company to offer Londoners a real alternative to the big six. The Mayor promised to set this up, but has recently opted for a 'white label' energy company. This is essentially a branding exercise, where the GLA buys energy from an existing energy company and packages it for resale to Londoners.

The Energy for Londoners feasibility study, published September 2017 says:

"The main advantage of fully licensed supply over the other two options is that EfL would have complete independence, able to capture the full value of customer energy spend for regional reinvestment, set tariffs contracts and product terms, install smart meters, and purchase power from local generation. It offers the greatest scope for creating local skilled jobs, and as the traditional route to market for an entrant, it is also the most proven path with the greatest level of support and experience from consultants and service providers. For this reason, fully licensed supply offers EfL greater flexibility and greater revenue compared to White Label Plus."

This is a huge mistake. The Mayor needs to put his resources into setting up a fully-licensed energy supply company as he told me he would at Mayors Questions on 22 June 2016^{lvi}. This would

enable him to offer Londoners cheap energy tariffs and provide him with the resources to invest in energy sector jobs and renewable energy to cut fuel poverty.

The Mayor's own feasibility study^{lvii} made clear that a fully-licensed energy supply company was the best option. It was only because the weighting in the study favoured very quick delivery that the white label option won out^{lviii}.

Islington Council has recently launched Angelic Energy, a 'white label' energy supply company procuring energy from Robin Hood Energy in Nottingham^{lix}. This reinforces the case that London boroughs should be able to procure their energy from a fully-licensed Mayoral supply company rather than going to Nottingham as Islington has had to. It also means there is no need for another 'white label' version as Londoners can now select Angelic Energy as their energy company.

Transport for London must help

The Strategy refers to the need to decarbonise energy grids to achieve the target of a zero carbon city by 2050. However, instead of relying on national action, the Mayor should require Transport for London (TfL) which is the biggest energy consumer in London, due to spend £665 million on energy 2020-2023, to source 60 percent of its energy by 2025 from renewable sources.

Transport for London (TfL) should also seek to maximise the potential for solar panels in all new transport infrastructure at the design stage.

Solar energy on our rooftops

The Green Party Group on the Assembly has lobbied the Mayor^{lx} and his predecessor^{lxi} to lead the way in solar generation. I welcome his commitment for a solar revolution and the first draft solar action Plan for London. It's essential that his mapping of the energy generation potential on the GLA group estate happens as

soon as possible and is accompanied by an implementation plan.

The target to double solar generation through the Mayor's own programmes by 2030 is not ambitious enough.

The Assembly Environment Committee's report 'Bring me sunshine'^{lxii} estimated that half of the rooftops in London could be suitable for solar PV panels and that London has the potential to meet a fifth of its electricity needs from solar. The Mayor's ambition should be on this scale.

Less than half a per cent of the city's three million homes generate solar power and those provide one per cent of London's electricity needs. The Mayor's 2030 target for solar deployment should be revised upward and based on this potential. The Mayor should look at the 'Norfolk Collective Solar Scheme'^{lxiii}, as an example of collective purchasing for domestic consumers for building market volume.

Every development approved by the Mayor should be required to fit the maximum possible on-site solar panel capacity in both new build homes and offices.

The Mayor should also consider large scale solar installations in outer London on lower quality agricultural land. Providing it meets the Solar Trade Association's guidelines of incorporating agricultural or biodiversity measures and is sensitive to local needs^{lxiv}.

I support the aim of helping Londoners make informed decisions about investing in solar energy. The Mayor should provide a one-stop-shop for public, community and commercial enquiries, offering a suite of attractive deals and using his purchasing power to reduce unit costs.

Another way to boost solar deployment would be for the Mayor to offer Londoners a solar ISA to invest in solar energy schemes similar to the one offered by Swindon Borough Council^{lxv}.

WHAT DO YOU THINK?

I would like to keep hearing your views on planning for improvements in these areas of policy, so please contact me to share your ideas and solutions.

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This report sets out my views as an individual Assembly Member and not the agreed view of the entire Assembly.

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