

Environment Scrutiny Commission

Wednesday 1 July 2020

7.00 pm

Online / virtual .Members of the public are welcome to attend the meeting. Please contact FitzroyAntonio.williams@southwark.gov.uk or julie.timbrell@southwark.gov.uk

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Date: 6 July 2020.

Southwark Council's Environment Scrutiny Commission's

Air Quality Report

July 2020



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1 Executive Summary

The Impact of Poor Air Quality.

Poor air quality kills. One of the biggest contributors to poor air quality are transport emissions, particularly diesel. Tiny particulates (PM2.5) released by diesel vehicles are so small that they can travel deep into the lungs, aggravating breathing problems such as asthma, and lead to worsening of heart and lung diseases.

Dr Ian Mudway advised the Commission that across the UK long-term exposure to man-made air pollution is thought to have an effect equivalent to 28,000 to 36,000 deaths a year. Small particulates (PM2.5) alone are estimated to cause an average per person loss of life expectancy of 7 months for the UK population as a whole. Children, older people and those with respiratory conditions are particularly vulnerable to exposure, however poor air quality impacts everybody over their life course. Furthermore, recent evidence indicates that air pollution may be key contributor to COVID-19 deaths.

In Southwark both Nitrogen Dioxide and Particulates are above safe levels in many parts of the borough. Thirty-three locations in Southwark exceeded air pollution targets in 2019. It is clear we are facing a public health crisis that we need to tackle urgently.

Over the course of a year the Commission has taken a wide range of evidence from council officers, cabinet members, health experts, transport experts, community groups, environmental groups and activists and students to find out what interventions are needed to improve air quality and ultimately people's health in Southwark.

In parallel with other strategies such as the Climate Emergency, our recommendations seek to recreate Southwark as an inner city area with high air quality which is marked by the lowest possible private car use and ownership, freight delivered sustainably and an urban environment that is highly conducive to walking and cycling and in due course the return of public transport.

We are aware that much of this will require significant input at a London-wide level (e.g. with the introduction of Road User Charging) but there is much that Southwark can do locally to aid this transformation.

Below we set out our rationale for these recommendations and how our ambition will be delivered as one of the many objectives Southwark Council has to improve the health and wellbeing of its numerous residents, workers and visitors.

Air quality is a social justice issue

We found that car ownership is closely linked to higher incomes, while the harm traffic causes falls most heavily on those with lowest incomes. In Southwark 69% of households Newington ward have no car or van access whereas only 28% of Village ward households do not.

Dr Mudway said at the first Commission meeting that “it is the people who matter.” All the data suggests that children, people with disabilities, BAME communities and those on the lowest incomes, who are least equipped to cope with the ill-effects of pollution in particular, are most at risk.

Southwark Council’s Movement Plan

In March 2018, the Mayor of London’s Transport Strategy (MTS) was adopted. This underscores the role transport can play on health, wellbeing and the quality of the places we live and work in. In response, Southwark Council moved boldly and developed a Movement Plan with a holistic public health led approach and active travel at its heart.

The Movement Plan needs, however, to embed social justice at its core, ensuring that the council prioritises interventions based on objective needs and known health inequalities.

Organisational attention also needs to be paid to teams and changes should be made to eliminate silo working and instead ensure that cross-departmental cooperation is embedded in our structures.

Furthermore, after taking twice evidence from officers, there was concern that the operational activity to deliver the positive ambitions of the Movement Plan lacked a coherent programme. The Commission identified deprivation data sitting behind the plan which identified the locations of greatest need, but there was no evidence that this has been used to drive funding decisions in a systematic way. There were concerns too that an excessive weight was given to programmes of behavioural rather than infrastructure/physical change.

With the Movement Plan now adopted, tangible steps taken by Southwark so far include the development of a number of low emission neighbourhoods to reduce through traffic by motorised vehicles along with a School Streets programme that will improve road safety and air quality around schools and discourage driving. All of this work has been accelerated and deepened by Southwark’s initial bold response to the TfL Streetspace for London Plan, which aims to rapidly increase walking and cycling as lockdown eases.

Measures to tackle poor air quality.

During the Commission members visited the LB Waltham Forest Mini-Holland scheme to find out more about recent progress. This includes the creation of a number of Low Traffic Neighbourhoods consisting of some 40 modal filters that prevent local neighbourhood streets being used by motorists as through routes, significantly decrease short car journeys and instead encourage more movement by foot and cycle as the streets become safer and quieter. The Low Traffic Neighbourhoods have been complemented by around h 22km of protected cycle lanes on main roads.

Living Streets reported that the first Low Traffic Neighbourhood in Walthamstow Village saw motor traffic levels fall by over half inside the residential areas and by 16% when the adjacent main roads are taken into account. Motor traffic levels had

declined by over 5% on the main road nearest the site of the borough's second Low Traffic Neighbourhoods scheme. This data is positive; however the Commission is acutely aware that the introduction of Low Traffic Neighbourhoods must be accompanied by measures to ensure that traffic is driven down overall.

The Commission recommends that Low Traffic Neighbourhoods be delivered across Southwark, starting with areas with the highest levels of public transport, worse air quality and most vulnerable populations. Any risk of displacement of traffic onto main roads by Low Traffic Neighbourhoods must be complimented by measures to prevent this and ensure air quality is carefully monitored as our communities live, work, and go to school on both side roads and main roads.

It is clear that Southwark needs to make it easier for people to cycle and walk and also needs to take bold measures to discourage people from driving in and through the borough. In order to achieve the above we will need to transform our neighbourhoods and main road high streets to support walking, cycling and public transport. This should be coupled with a programme to enable sustainable freight deliveries. Travel by private vehicle must become the exception rather than the rule especially for the numerous short journeys that are currently driven.

The Themes of our Recommendations

Cycling advocates highlighted the issue of perverse parking charges; currently it is common for cars to be charged in the region of £125 per year for a residential parking space, whereas a space in a bike hanger (storing 6 bicycles) is £48, despite cycling's health and air quality benefits and low use of kerbside space. In the light of this, we recommend that parking charges should increase and include parking on all Southwark's own housing estates. In addition, Southwark Council should make a commitment to repurposing 10% of kerbside car storage to cycle storage within the next 18 months. All new developments should provide a minimum of 1 secure cycle space per dwelling. With the exception of provision for those with disabilities, Southwark should no longer grant car parking space in any new developments. Furthermore, we recommend setting a target for reductions in on-street residential parking spaces (particularly where Low Traffic Neighbourhoods are developed) and identify alternative uses for them (e.g. community parklets).

Southwark should adopt a local target to halve petrol and diesel road journeys by 2025, and by 90% by 2030, and encourage London Councils and the Mayor to do likewise.

Electrical Vehicles (EV) are an improvement on diesel and petrol vehicles however they still contribute harmful Particulates through road, tyre, and brake dust. EV cars also require the maintenance of the vehicular infrastructure that we want to see transformed to support walking and cycling, therefore our support for EV ought to be limited to buses, car clubs, scooters and bicycles.

The GLA has recently reported that levels of NO₂ on some of London's busiest roads have fallen on average to half what they were before the lockdown. This is in addition to the significant reductions in pollution being delivered by policies that include the world's first Ultra Low Emission Zone (ULEZ), which had contributed to a

44 per cent reduction (over February 2017 levels) in roadside NO₂ in the Central Congestion Charge Zone prior to the lockdown. It is critical that we lobby the GLA to ensure delivery of ULEZ expansion in October 2021. At present, the ULEZ expansion is only planned to extend from its current boundary (the Central Congestion Charging Zone) to the south circular. All parts of Southwark should benefit from the ULEZ expansion and we should argue strongly that the whole of the borough should be included.

The coronavirus pandemic has shown us that governments can quickly implement potentially unpopular policies in the interest of the public good and that we can respond to a crisis when we need to. Society now needs to respond to the air quality crisis with the same urgency and at the same comprehensive scale. In Southwark, the signs are extremely positive with the initial round of COVID-19 transport measures that includes Southwark's first large-scale Low Traffic Neighbourhood scheme along with delivery of protected cycle lanes.

Although funding will be far from plentiful for the foreseeable future, further bold action using low cost interventions on main roads and across our neighbourhoods combined with fairer pricing for motor vehicle ownership and usage is needed. This, combined with support and action from the GLA and TfL, offers a real prospect of transforming Southwark into a place where all will have the air quality that they have a right to and where the previous injustices of the least affluent having the poorest air quality have finally been overcome.

2 Summary of recommendations

Recommendation 1: Develop an operational plan with partners to implement this, focusing on structural changes, informed by the ambitions of the Movement Plan and its associated deprivation data.

Recommendation 2: The Movement Plan needs to embed social justice at its core, ensuring the council prioritises interventions based on need and health inequalities. Organisational attention needs to be paid to teams and changes should be made to eliminate silo working and instead ensure cross-departmental cooperation embedded in our structures.

Recommendation 3: Southwark Council should roll out a School Streets programme across every school in the borough. Where schools are sited on main roads and road closures are not possible, pavement widening should occur to make the area around the school safer and more attractive. School Streets should be seen as a starting point for more permanent change across the local/surrounding area that supports the whole journey to school.

Recommendations 4: End the current diesel contract for Southwark fleet vehicles and switch to EV as soon as possible. Swap EV for sustainable transport / freight. Revisit our procurement strategy to ensure subcontractors have EV or a sustainable fleet. Set a cut-off date for compliance so that subcontractors have time to make the switch.

Recommendation 5: Drive down total private vehicle usage over time so that by 2030 only a limited number of EV vehicles are in common use on Southwark roads. Set targets for yearly traffic volume reduction. Adopt a local target to halve petrol and diesel road journeys by 2025, and by 90% by 2030, and encourage London Councils and the Mayor to do likewise.

Recommendation 6: Support for the rollout of EV should be limited to

- Car clubs
- EV Bicycles and scooters
- EV Commercial freight
- EV Public transport

Recommendation 7: Lobby the GLA to ensure delivery of ULEZ expansion in October 2021. At present, the ULEZ expansion is only planned to extend from its current boundary (the Central Congestion Charging Zone) to the south circular meaning that parts of Southwark will be excluded when it is due to come into force in October 2021. It is important that all parts of Southwark benefit from the ULEZ expansion and we should argue for the whole of the borough to be included.

Recommendation 8: Lobby the GLA to introduce Road User Charging as a matter of urgency. As the Centre for London July 2018 report on Road User Charging¹ shows, road user charging is the most equitable way to allocate the use of road space across London.

Recommendation 9: The Movement Plan (M5 – Action 11) envisaged an expansion of timed closures in high footfall areas. We recommend seeing this come forward as a matter of urgency with locations where pedestrian footfall is extremely high being potential candidates for early action. Locations could include – Bermondsey St, St Thomas St between London Bridge Station and Guys Hospital and Elephant Road (E&C).

Recommendation 10:

Lobby TfL to:

- Extend the Low Emission Bus route programme to include the Old Kent Road and New Kent Road, the A215 corridor (Walworth and Camberwell), Tower Bridge Road and the Newington Causeway/Borough High Street A3 corridor, London Road (E&C) and Rye Lane.
- Bring forward schemes that improve public transport in areas with poor air quality and poor PTAL provision in the central and northern parts of the borough.

¹ <https://www.centreforlondon.org/project/road-user-charging-london/>

- Promote bus and cycling only corridors (e.g. Rye Lane, Walworth Road). We should identify three ‘corridors’ such as this one and state an ambitious goal for them to be bus and car free in the near future).

Recommendation 11: The council should make a commitment to repurposing 10% of kerbside car storage to cycle storage within the next 18 months. All new developments should provide a minimum of 2 secure cycle spaces per dwelling. Southwark should no longer grant car parking space in any new developments, other than Blue Badge.

Recommendation 12: Rollout secure bike storage in the tens of thousands, directly replacing car storage spaces and utilise bike storage as modal filters, where suitable.

We recommend that this is part of planned and integrated programme of bike storage:

- On roads
- At Transport hubs
- Near cargo bikes

Recommendation 13: We recommend that Southwark adopts a maximum charge for bike hubs/hangers that ensures that is cheaper than car parking by space.

Recommendation 14: Introduce a borough wide programme of Low Traffic Neighbourhoods. These should be implemented:

- Over a wide enough area in order to realise the benefits of traffic evaporation, which has been shown to take place when there is a significant reduction of short journeys by car under 2km.
- As a priority in areas with high levels of public transport (high PTAL ratings), poor air quality, lower levels of car ownership, in areas of deprivation and where the programs would impact positively on local schools and hospitals.
- Where traffic may be displaced onto main roads, the council must monitor the impact on air quality, and mitigate negative effects in advance of implementation, possibly by widening pavements and creating cycle lanes, managing traffic to reduce vehicle idling time and introducing green screening programmes.
- In conjunction with the introduction of CPZ and a reduction of parking so the kerbside can be utilised for active travel and public realm improvements (such as pocket parks and cycle parking.)
- In conjunction with improvements to Public Transport and other work on adjacent main roads to increase cycling and other forms of active travel.

Recommendation 15:

- Incorporating sustainable freight/delivery hubs into all regeneration projects – Old Kent Road, Elephant & Castle and Canada Water.

- Encouraging sustainable freight as part of other major town centre development schemes such as Aylesham Centre in Peckham, Butterfly Walk in Camberwell and the Morrison's site in Walworth.
- Incorporating sustainable freight into Low Emission Zone/Neighbourhood and Liveable Neighbourhood projects.
- Co-ordinating skills sharing between the BIDs and local groups interested in setting up sustainable freight centres.
- Enabling/supporting local click and collections hubs in town centres/local centres across the borough.
- Developing its LTN programme which will give a competitive advantage for cargo bikes which can pass through permeable filters whereas motor vehicles may be taking a more circuitous route.

Recommendation 16: Increase the cost of car parking for all motor vehicles other than those of Blue Badge holders, with steeper increases for owners of diesel cars, vans and large vehicles and for residential parking for those households with more than one vehicle

Recommendation 17: Consistent with the Movement Plan, we recommend adding a cost to spaces and setting a target of a 5 % reduction per year in order to reach a goal of 50% reduction in parking over 10 years. We propose a consistent parking charging policy for our estates and the removal of free parking on them. This needs to be done alongside a borough-wide bike storage programme.

Recommendation 18: Introduce a borough-wide CPZ, renamed a Community Kerbside Zone.

Recommendation 19: A borough-wide greenery programme to use native hedges to screen to against air pollution, ecological planting and also improve the environment and place making. Examples include allotments and wildlife sanctuaries.

Recommendation 20: A new Air Quality public health focused communication plan is needed that highlights serious harms to health and which explains why Southwark will take a similar approach to banning smoking, e.g. borough-wide action to tackle Air Quality. It must clearly explain the benefits and the incremental changes that will need to take place, over a period of time.

Alongside this, we need to launch a public education programme similar to the stop smoking campaign on the damage that poor air quality does - particularly to deprived residents. [Note: this is ever more important in the light of COVID-19 and its disproportionately detrimental effect on deprived and BAME communities and those living in areas of poor air quality].

3 Introduction

Why have we conducted this review?

As the recorded temperature of the earth gets hotter, internal combustion engines in almost all motor vehicles continue to pump out dirty emissions, while half the world's population has no access to clean fuels or technologies (e.g. stoves, lamps) with the result that the very air we breathe is growing dangerously polluted: nine out of ten people now breathe polluted air, which kills 7 million people every year.

The health effects of air pollution are varied – one third of deaths from stroke, lung cancer and heart disease are due to air pollution. This is having an equivalent effect to that of smoking tobacco, and is much higher than, say, the effects of eating too much salt. Exposure to poor air quality is associated with both ill-health and premature death.

Air pollution is hard to escape and tends to be unequally distributed. Those on the lowest incomes are often disproportionately affected. It is all around us. Microscopic pollutants in the air can slip past our body's defenses, penetrating deep into our respiratory and circulatory system, damaging our lungs, heart and brain.

Air pollution is also closely linked to climate change - the main driver of climate change is fossil fuel combustion which is itself a major contributor to air pollution - and efforts to mitigate one can improve the other.²

Air pollution is ubiquitous, but in urban and especially areas with high traffic, exposures can be high. Numerous research studies replicated across the world agree that breathing air of poor-quality impacts on human health. People may be affected by poor air quality even if they never experience any noticeable pollution related health effects.

Southwark

Air quality in Southwark is a major health problem. To put it bluntly we have levels of NO and PM in many parts of the borough that are above what the World Health Organisation deem safe. Thirty three locations in Southwark failed to reach Nitrogen Dioxide air quality targets in 2019 of 40mg.m⁻³, the UK air quality target, with 5 locations above 60mg.m⁻³.

A data audit, conducted by environmental group Friends of the Earth in 2017, found two locations– those surrounding Haddon Hall on Tower Bridge Road, and Peckham High Street – recorded levels more than double the limit, a whopping 90.79ug/m³ and 87.51ug/m³ respectively, and are two on of the top ten most polluted in London.

² <https://www.who.int/airpollution/news-and-events/how-air-pollution-is-destroying-our-health>

4 Covid 19



Recent evidence shows that air pollution may be a key contributor to COVID-19 deaths. Research shows almost 80% of deaths across four countries were in the most polluted regions.

The analysis shows that of the coronavirus deaths across 66 administrative regions in Italy, Spain, France and Germany, 78% of them occurred in just five regions; the most polluted.

The research examined levels of nitrogen dioxide, a pollutant produced by internal combustion, especially diesel vehicles, and weather conditions that can prevent polluted air from dispersing away from a city. Many studies have linked NO₂ exposure to health damage, and particularly lung disease, which could make people more likely to die if they contract COVID-19.

“The results indicate that long-term exposure to this pollutant may be one of the most important contributors to fatality caused by the COVID-19 virus in these regions and maybe across the whole world,” says Yaron Ogen, at Martin Luther University Halle-Wittenberg in Germany, who conducted the research. “Poisoning our environment means poisoning our own body, and when it experiences chronic respiratory stress its ability to defend itself from infections is limited.”

On a more positive note, the GLA has reported that levels of NO₂ on some of London’s busiest roads have fallen on average to half what they were before lockdown. This is in addition to the significant reductions delivered by policies including the world’s first Ultra Low Emission Zone (ULEZ), which contributed to a 44 per cent reduction in roadside NO₂ in the Central Congestion Charge Zone prior to lockdown.³

This is, therefore, a clear and pressing public health issue that we need to tackle. To understand the issues more fully and to develop potential solutions, we have taken evidence from a wide range of individuals and groups during the Commission.

5 Commission witnesses

Officer attendance:

- Sarah Newman, Business Unit Manger Environmental Health & Trading Standards

³ <https://www.london.gov.uk/WHAT-WE-DO/environment/environment-publications/estimation-changes-air-pollution-during-covid-19-outbreak-0>

- Pip Howson, Team Leader Transport policy
- Juliet Seymour, Planning Policy Manager
- Tim Cutts, Senior Regeneration Manager
- Jin Lin, Deputy Director of Public Health
- Simon Bevan, Director of Planning

Members

- Councillor Richard Livingstone, Cabinet Member for Environment, Transport and the Climate Emergency
- Councillor Johnson Situ, Cabinet Member for Growth, Development and Planning

Partners

- Casper and Ella, Eco School Councillors at Judith Kerr Primary
- Dr Ian Mudway, senior lecture at the School of Population Health and Environmental Sciences at King's College London
- Mums for Lungs
- Dulwich and Herne Hill Safe Routes to School
- Katherine Jacobs, Living Streets, London
- Karrim Jalali, Fossil Free Southwark
- The Zero Emissions Network
- Iskander Erzini Vernoit, Bill Perry, Caoimhe Basketter from Southwark Extinction Rebellion
- Councillor Adam Harrison, Cabinet member for a Sustainable Camden
- Fiona Sutherland, Deputy Director, London Play
- Peter Walker; cyclist, blogger, journalist, author and Southwark resident
- Simon Munk, London Cycling Campaign
- Paul Gasson, Waltham Forest
- David Smith, grassroots South London air quality campaigner who blogs, tweets and campaigns as Little Ninja

6 How power and influence is divided in the environment field

Role for Local Authorities: Local authorities in the UK have a responsibility under Local Air Quality Management (LAQM) legislation to review air quality. Where concentrations exceed national objectives, measures should be put in place to reduce emissions, and be reported in the local Air Quality Action Plan (AQAP). Most such Action Plans are designed to address difficulties in complying with national objectives for either NO₂ or PM₁₀.

The Environment Act 1995 requires the UK Government and the devolved administrations for Scotland and Wales to produce a national air quality strategy containing standards, objectives and measures for improving ambient air quality and to keep these policies under review.

In addition to this, the EU “*Air Quality Directive*” (EU Directive 2008/50/EC) on *ambient air quality and cleaner air for Europe* sets legally binding standards for ambient air quality (the condition of the air in the outdoor environment). The Directive is implemented in the UK through regulations for each country. The UK is in breach of this act and was taken to Europe’s highest court to explain the failure to take an adequate response and still faces millions of pounds in fines for the failure to safeguard UK citizens in accordance with European rules.

The local air quality management (LAQM) regime requires every district and unitary authority to regularly review and assess air quality in their area. Southwark provides an annual report. These reviews identify whether national objectives have been, or will be, achieved at relevant locations, by an applicable date.

Actions Southwark as a local authority can do to improve air quality

Local authorities use various means to achieve air quality standards, such as traffic and parking management, road design and planning, vehicle regulation, introducing Clean Air Zones, establishing Smoke Control Areas, enforcing statutory nuisance powers and regulating planning.

GLA actions

A recent GLA report reveals that the introduction of policies including the world's first ULEZ have contributed to a reduction of 44 per cent in roadside NO₂ in the Central London ULEZ zone. In January there were 44,100 fewer polluting vehicles being driven in the central zone every day with 79 per cent of vehicles in the zone now meeting the ULEZ emissions standards - up from 39 per cent in February 2017.

Around half of London's air pollution comes from road transport. Evidence shows how our polluted air is often caused by the way we choose to move around the city. In the year leading up to the Covid pandemic, nearly half of car trips made by Londoners could have been cycled in around ten minutes.

National proposals to improve air quality

The Government has published and consulted on various proposals aimed at improving local air quality management. Some of these were included in the Environment Bill 2019 which fell at Dissolution. A new Environment Bill (Bill 9, 2019-20) was introduced on 30 January 2020 and contains measures to clarify duties and

enable greater cooperation under the Local Air Quality Management Framework, make smoke emissions in Smoke Control Areas in England subject to civil penalty notices (fines) rather than prosecution as criminal offences, and redefine smoke from private dwellings in smoke control areas in England as a statutory nuisance.⁴

7 The harms of air pollution

Dr Ian Mudway advised the Commission that across the UK as a whole:

- Long-term exposure to man-made air pollution is thought to have an effect equivalent to 28,000 to 36,000 deaths a year.
- PM2.5 alone is estimated to cause an average per person loss of life expectancy of 7 months for the UK population as a whole.
- The health costs arising from air pollution are thought to add up to more than £20 billion per year, although this figure is conservative and the true cost could be higher.
- More than 8% of all deaths in the UK are linked to air pollution. This is much lower than in many developing countries, where as many as a quarter of deaths are attributable to air pollution, but it still puts us 55th in the world in terms of the proportion of deaths caused by air pollution –higher than a range of other countries including the United States, Iceland, Sweden, Canada and Norway.

Dr Mudway told the Commission that there is an urgent need to improve our air quality, especially within our traffic-congested cities. Policies such as Low Emission Zones strive to do this, but their effectiveness needs careful and objective evaluation, not only in terms of whether they improve air quality, but more importantly, whether they deliver better health.

As the evidence base grows, demonstrating that air pollution impacts on the health of children in our cities, so the justification for decisive action increases. Air pollution has an affects the capacity to learn, through structural changes in the brain of children. Air pollution contributes to premature death.

Harm over the life course

In the short-term, air pollution can lead to irritation to the eyes, nose and throat, headaches, nausea, bronchitis and pneumonia.

Over a longer period, it can result in heart attacks and lung diseases, cancers, even damage to the brain, nerves, liver, and kidneys, and contribute to premature death.

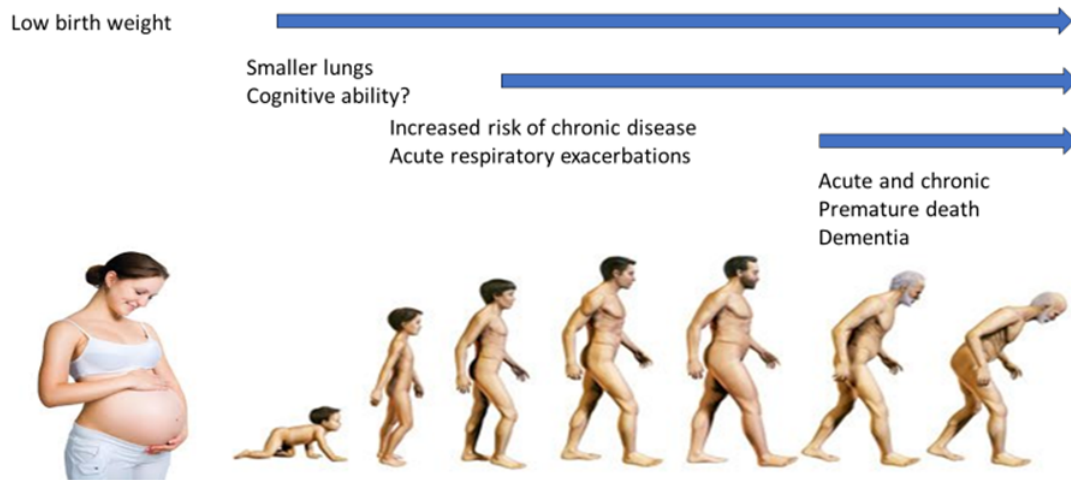
Children are especially vulnerable and at risk of lifelong breathing disorders, asthma attacks, chest infections and earlier death.

He said that we need to be careful that the debate just doesn't focus on levels of exposures and short-term effects. We need to look at the long-term effects and the development of the disease. For example, there is evidence to suggest that air pollution is linked to dementia. This, therefore, puts a massive strain on adult social care in the longer term.

⁴ <https://commonslibrary.parliament.uk/research-briefings/cbp-8804/>

Slide source: Dr Ian Mudway, Kings College London

Impacts of Air Pollution across the Life Course



The Dangers of Diesel

Air pollution, especially from diesel engines, is a "neglected, hidden killer" and children and old people are especially at risk. There is strong evidence that if you live near main roads you will have smaller lungs and that they will not reach capacity and will be stunted. Emissions from diesel vehicles are significantly more harmful than those from petrol vehicles. Diesel combustion exhaust is a source of atmospheric soot and fine particles, which is a component of the air pollution implicated in human cancer, heart and lung damage, and mental functioning. Diesel engines produce nitrogen dioxide (NO₂), which irritates the lungs of people with breathing problems. Diesels fumes contain several times more NO₂ than petrol cars.

Experimental evidence

In a study led by King's College London, Queen Mary University of London and the University of Edinburgh, 164 children aged 8-9 were enrolled into the study from 28 primary schools in the London boroughs of Tower Hamlets, Hackney, Greenwich and the City of London (all areas which fail to meet current EU nitrogen dioxide limits). The research team monitored children's health and exposure to air pollutants over five years, covering the period when the LEZ was introduced, and found:

Children exposed to air pollution showed significantly smaller lung volume (a loss of approximately 5 per cent in lung capacity). This was linked to annual exposures of nitrogen dioxide (NO₂) and other nitrogen oxides (NO_x), both of which are in diesel emissions, and particulate matter (PM₁₀).

Following the implementation of London's LEZ, there were small improvements in NO₂ and NO_x levels, but no improvements in PM₁₀.

Despite these improvements in air quality, there was no evidence of a reduction in the proportion of children with small lungs or asthma symptoms over this period.

The percentage of children living at addresses exceeding the EU limit for NO₂ fell following the LEZ introduction, from 99 per cent in 2009 to 34 per cent in 2013, but they were exposed to higher levels when at school, many of which were next to busy roads.

Low Emission Zones (LEZ) restrict or penalise specific vehicle entry into urban areas and may encourage the uptake of lower emission technologies. London introduced the world's largest city-wide LEZ in 2008, roughly contiguous with the M25 orbital motorway and encompassing around 8.5 million residents. But up until now, there has been little evidence on whether LEZs improve air quality or public health.

Electric Vehicles (EV)

Whilst EVs do not emit exhaust fumes at the point of use, they emit fine particles through brake and tyre wear and road dust, and therefore contribute to raised levels of PM2.5 and PM10 particulates.

8 Social Justice and Air Quality

Taming car traffic: a social justice issue' - Rachel Aldred, Reader in Transport, Director of the Active Travel Academy.

'The communities that have access to fewest cars tend to suffer from the highest levels of air pollution, whereas those in which car ownership is greatest enjoy the cleanest air. Pollution is most concentrated in areas where young children and their parents are more likely to live. Those communities that are most polluted and which also emit the least pollution tend to be amongst the poorest in Britain. There is therefore evidence of environmental injustice in the distribution and production of poor air quality.'

This presentation, originally provided for Hackney, demonstrated that car ownership is closely linked to higher incomes, and the harms of traffic fall on those with lowest incomes. Collisions involving those walking and cycling are much more likely to involve people with low income, disabled people, and those who are not car owners.

Similarly, in Southwark 69% of households in Newington ward have no car or van access whereas only 28% of Village ward households do not. Nationally and locally, pollution and the harms of traffic are most concentrated in areas where children and families live.⁵

It is critical to point out that Black communities in London are disproportionately more likely to breathe illegal levels of air pollution than White and Asian ones, new research seen exclusively by the Guardian shows. A study for the Mayor of London shows Black, African and Caribbean people account for 15.3% of all Londoners exposed to NO2 levels that breach EU limits, but they account for just 13.3% of the city's population. The proportion of White and Asian individuals exposed to the dangerous NO2 levels is lower than the fraction of the population they account for, said Aether, the consultancy which produced the report.

5

See *Taming car traffic: a social justice issue*, a presentation given by Rachel Aldred, Reader in Transport University of Westminster, to Haringey Council.

Southwark, Lambeth and Hackney were among the boroughs with an overlap of both a higher proportion of Black residents and the higher pollution levels.⁶

As Dr Mudway said at the first Commission “it is the people who matter.” Addressing the impact of air pollution and traffic on Southwark residents requires the council to make its policy crafting far more data rich, overlaying demographic information on age and disability, alongside information on council tax bands, indices of multiple deprivation, car ownership, journeys and more - to fully understand who in the borough experiences the benefits of and who suffers from our actions.

All the data suggests that children, disabled people, BAME communities and those on the lowest incomes, who are least equipped to cope with the ill-effects of pollution in particular, are most at risk. Moreover, these groups are least likely to produce the emissions that are most harmful, and so experience a double injustice.

9 How other cities are leading the way



Many cities across the world are transforming themselves to adapt to climate changes and address increases in air pollution. The Commission considered the approach taken by the Mayor of Tirana, the capital of Albania, which prioritised children in the provision of transport, piloting temporary car free days, followed by banning cars in the city centre. More recently they have decided to mirror the provision of public space to the patterns of car ownership and are working to ensure that the public realm priorities disabled and older people. In Tirana, 80% of households do not own cars so instead of building roads they have built linear parks with children and adult play spaces, cycleway and pathways.

Other European cities have taken a similar approach of prioritising children over car owners:

“The great city is not the one that has highways, but one where a child on a tricycle or bicycle can go safely everywhere.” ~ Enrique Peñalosa, former Mayor of Bogotá.

The Paris Mayor, Anne Hidalgo, has made phasing out vehicles and creating a “15-minute city” a key pillar of her offering at the launch of her re-election campaign. The idea is to encourage more self-sufficient communities within each arrondissement of

⁶ <https://www.theguardian.com/environment/2016/oct/10/londons-black-communities-disproportionately-exposed-to-air-pollution-study>

the French capital, with grocery shops, parks, cafes, sports facilities, health centres, schools and even workplaces just a walk or bike ride away.

Called the “*ville du quart d’heure*” – the quarter-hour city – the aim is to offer Parisians what they need on or near their doorstep to ensure an “ecological transformation” of the capital into a collection of neighbourhoods. This would reduce pollution and stress, creating socially and economically mixed districts to improve overall quality of life for residents and visitors.

We need to *Integrate, integrate, integrate!* Cities need to consider transport, urban planning, business, public services, energy and food supply as part of the same integrated system. They should offer people choice and easy connections.

Pop-up bike lanes have helped with coronavirus-related physical distancing in Germany. German cities are redrawing road markings to create “pop-up” cycle lanes for the duration of the COVID-19 lockdown, as cyclists demand more space to physically distance on their commutes to work. Local authorities in the Kreuzberg district of Berlin trialed a temporary widening of two cycle lanes on 27 March, arguing it would help cyclists keep the required 1.5-metre distance apart while car traffic had declined owing to Germany’s coronavirus restrictions. The council has already declared the pilot scheme a success because it had improved cycling safety while not hindering traffic.

10 Movement Plan



In March 2018, the Mayor of London’s Transport Strategy (MTS) was adopted. This has a greater focus on health, wellbeing and the importance of place. Each council in London was required to prepare a Local Implementation Plan (LIP) to detail how the authority will assist in delivering the Mayor’s Transport Strategy.

In response, Southwark Council made a bold move away from its previous approach of developing Transport Strategies and instead prepared a far more holistic Movement Plan with a public health led approach and active travel at its heart. The adopted Movement Plan is supported by a more technical document titled Southwark’s transport implementation plan which takes the ambition of the movement plan and meets the requirements of the borough’s LIP3 targets.

Southwark is responsible for local roads while TfL is responsible for red route main roads so a strong partnership between Southwark and TfL is important, with action needed from both TfL/GLA and Southwark to make improvements to air quality and public transport provision and thus improve the lives of people who live and work on these roads by reducing traffic and its impact.

The commission received two presentations on the Movement Plan, one in December 2019 and one in March 2020 where a number of local initiatives were also presented. The Commission also heard about big-ticket changes planned for the Old Kent Road, with the plans for the extension of the Bakerloo line and received an update on school streets from officers and local community groups.

Local neighbourhood initiatives and School streets

Currently there are three variations on low emission neighbourhoods that are being developed to reduce through traffic by motorised vehicles: a Livable Neighbourhood pilot around South Bermondsey station and the Bonamy & Bramcote Estates; Dulwich Healthy Streets; and the Walworth Low Emission Zone.

Dulwich Healthy Streets: A neighbourhood approach to working with the community to address concerns about traffic volume and its impact on the community. The project is focused around the Dulwich Village area. Proposals have been prepared and were subject to a consultation, which had been open until 29 March 2020. All the proposals were originally due to be subject to modelling and further in-depth consultation before implementation.

Walworth Low Emission Neighbourhood: a scheme to reduce vehicle movements and overall traffic levels both along the Walworth Road and through surrounding neighbourhoods. This made use of traffic management changes and other improvements to create new public spaces for people to enjoy whilst supporting walking and cycling.

Bonamy and Bramcote Liveable Neighbourhood: an initial data collection on traffic, parking, and local assets had been undertaken, as well as localised topographical surveys. Officers have been working with the community, attending Residents Association meetings, coordinating an on-street engagement event and sending out questionnaires to every household in the project area.

11 School streets

Along with many other London boroughs, Southwark has introduced a new programme called School Streets. The aim of this initiative is to improve road safety and air quality around a school and discourage driving. Restrictions are put in place in the road immediately outside a school at the beginning and end of a school day. Pedestrians and cyclists are still allowed to access the road during these hours.

Between 2018-2019 the following School Streets have been trailed and implemented:

- Bellenden Primary School Permanent.
- Bessemer Grange Primary School
- Robert Browning Primary School
- Harris Academy East Dulwich
- St Francis RC Primary School

- Goose Green Primary School
- Hollydale Primary School
- Ilderton Primary School
- Albion Primary School.

The demand for School Streets is high and there are over 30 schools in the borough on the waiting list. School Streets are highly popular with parents and children; however, the drawback is that they only cover a very small area and only a part of the journey to school. We have found the process and criteria for selecting which schools are chosen is not clear, for example if the area has high pollution levels or high levels of deprivation.

We need to consider how decisions are made as it is often the local residents who have the means, time and the knowhow who are able to influence council decisions such as targeting side roads.

There is also evidence that the closure of side roads, and other small schemes, do not reduce air pollution exposure for the people on main roads who are at greatest risk. There are certain criteria that must be met for traffic evaporation to take place effectively, a fact that is often overlooked by policy makers. If drivers can find an alternative route where levels of congestion are acceptable, they will continue to drive. If alternatives like cycling are deemed unsafe due to lack of protected cycleways or if there is insufficient space on public transport (as is the case at the moment due to the need for social distancing) then those with access to vehicles will continue to drive, increasing traffic congestion and air pollution on boundary/main roads.

While the Commission welcomed these local initiatives, on the whole, there was concern that the operational activity to deliver the positive ambitions of the Movement Plan lacked a coherent programme. The Commission discovered deprivation data sitting behind the plan, but this was not referred to by the officers in the meeting and there was no evidence that this is being used to drive funding decisions in a systematic way.

There is a risk that pockets of good practice will emerge only in places with the most vocal activists or in areas of large-scale regeneration, but these will not necessarily be the places with the greatest objective needs or that they will deliver the changes which will benefit the majority population. Furthermore, hyper local changes are most likely to cause unintended outcomes with displaced traffic, rather than the win-win outcome of traffic reducing overall (on both the neighbourhoods roads where through traffic had been removed AND adjacent main roads where traffic has evaporated). More work needs to be done to implement Low Traffic Neighbourhoods (LTNs) over a broader area, and in conjunction with TfL work on major roads. Projects should also be aligned with plans to increase public transport and active travel. Many of these issues have, however, been affected by the COVID-19 crisis and the subsequent Streetspace for London Plan. This has largely removed LIP3 funding and replaced it with pots of funding that are almost entirely focused on active

travel in the form of walking and cycling and in deterring the return of traffic to previous levels along with the negative impact that is associated with that of poor air quality, road casualties and deterrence of active travel.

The recent announcement by the Mayor of London that main streets in the city, including between London Bridge and Waterloo, will only be open for buses, pedestrians and cyclists, is a welcome response to the pandemic. He has also asked local councils to close neighbourhood roads to through traffic. An initiative such as Low Traffic Neighbourhoods would be complementary to this initiative and enable citizens to sustain the increased walking and cycling witnessed during lockdown. Measures will need to be taken to ensure people with impaired mobility are catered for.

Overall we commend the Movement Plan for having ambitious aims, but we have found that there is substantial gap between strategy and delivery. There is no observable delivery plan and decisions do not seem to be driven by data demonstrating need. LIP3 funding bids to TfL and their replacement during the lifetime of the Streetspace for London plan need to concentrate on the most effective actions to change the built environment and wider infrastructure, to enable more walking and cycling, reduce the impact of general traffic (in terms of volumes and speeds) and improve public transport, rather than focusing on behaviour change.

Recommendation 1: Develop an operational plan with partners to implement this, focusing on structural changes, informed by the ambitions of the Movement Plan and its associated deprivation data.

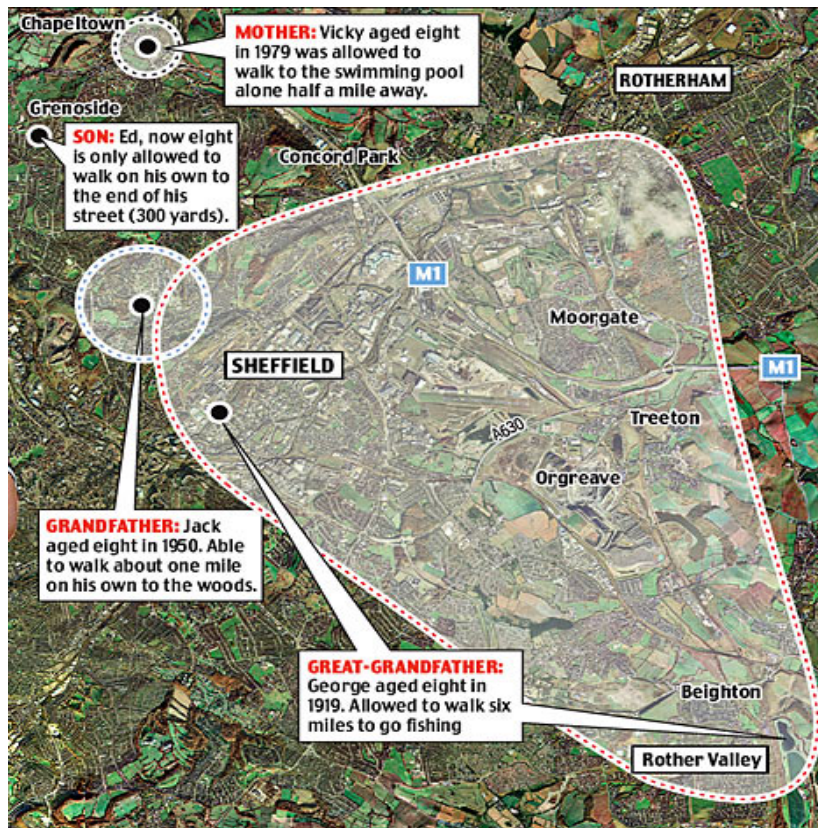
Recommendation 2: The Movement Plan needs to embed social justice at its core, ensuring the council prioritises interventions based on need and health inequalities. Organisational attention needs to be paid to teams and changes should be made to eliminate silo working and instead ensure cross-departmental cooperation embedded in our structures.

Recommendation 3: Southwark Council should roll out a School Streets programme across every school in the borough. Where schools are sited on main roads and road closures are not possible, pavement widening should occur to make the area around the school safer and more attractive. School Streets should be seen as a starting point for more permanent change across the local/surrounding area that supports the whole journey to school.

12 Ending the dominance of the car

The dominance of the car is a relatively recent phenomenon. Play Streets, who gave evidence to the Commission, charted the rise of car throughout the century and said it was only in the 1980s that this became fully established and that by this point traffic collision involving children were no longer treated as exceptional events.

The Commission was also struck the evidence that children's journey and freedoms have shrunk over time:



The presentation went on to outline how the dominance of the car in our inner cities has had a negative impact on children's freedoms and the loss of what is termed *Children's Independent Mobility*. Only 25% of primary school children are now allowed to travel home from school alone compared with 86% in 1971, the Policy Studies Institute at the University of Westminster found. Data collected in 1971, 1990 and 2010 discovered a large reduction in the youngsters' independent mobility - the extent to which parents allow them to play and travel around in their local area without any adults. While 48% of children want to cycle to school, only 2% actually do.

The evidence of Dulwich and Herne Hill Safe Routes to School to the Commission remarked on the long and good relationship with the council. There are now gold travel plans in 10% of Southwark schools. School children and families want to make use of active travel there are significant barriers – and they emphasised that unless it is safe and feels safe, families will not do it. Internationally the Safe School movement has evidence that it is infrastructural and engineering of the built environment that drives behaviour change. When walking and cycling is easy and safe people will do it.

They reported that School Streets is a good programme. Bessemer School in South Camberwell was provided as an example of children and parents enjoying the quiet play space, and there has been 6% modal shift in travel. However, what is needed is need a network of safe streets; a single School Street is not enough to drive significant change in travel patterns.

They said the dominance of the environment by the car produces alarming levels of road deaths and poor air quality and that this needs to change.

Katherine Jacobs, Living Streets' London Manager told the Commission that things are changing and the use of cars is starting to reverse, particularly in inner cities with good transport provision. However, this needs to accelerate as presently 88% of London's transport space is claimed by cars, and yet 45% of households do not have cars. In Southwark 60% of households do not have a car.

Transformative change based on a risk hierarchy

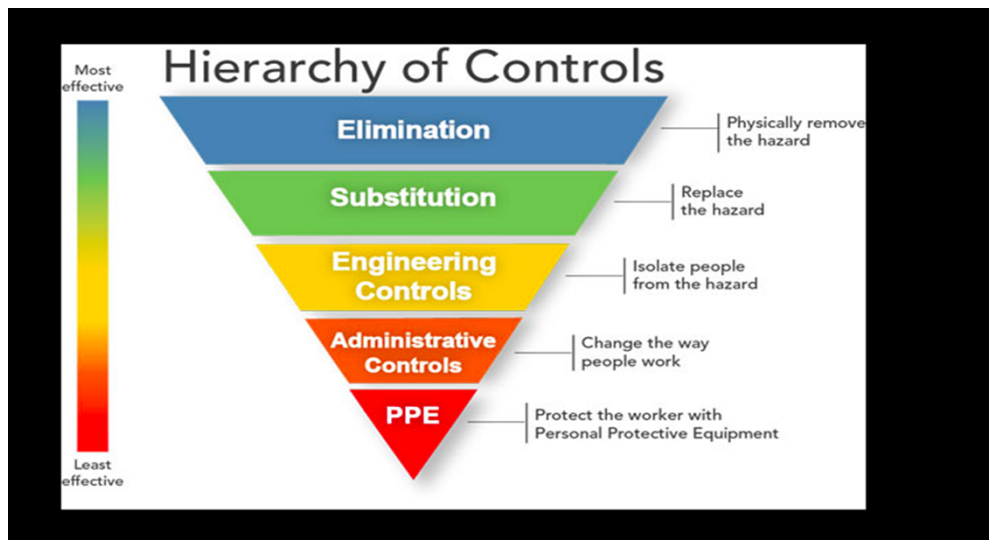
In seeking to tackle emissions far too often the approach in modern transport planning appears to have been one of sustaining the dominance of the car, alongside road, parking and neighbourhood infrastructure that sustains this transport system, while trying to mitigate the consequences, often through behaviorist techniques, which have proven to be ineffective.

This approach means that Southwark residents, including our children, will be continued to be exposed to dangerous levels of NO₂ and PM_{2.5} and PM₁₀ particulates, which Dr Mudway emphasised were harmful at even very low levels.

The Commission proposes an alternative approach which seeks to eliminate the primary cause of transport-based emissions; which is mainly private and commercial vehicular traffic, particularly from diesel and petrol-fueled vehicles.

In order to achieve the above we will need to transform our neighbourhoods to support walking, cycling, public transport, and low carbon commercial freight with vehicular transport being the exception rather than the rule.

Where elimination is not possible, other methodologies ought to be employed that use the below hierarchy of controls, moving down from the most effective to those considered least effective.



When applied to transport policy these are the kind of methodologies that map to different types of controls:

- **Elimination:** remove the hazard. Practically: dramatically reduce car volumes in the borough through a combined framework of interventions/mechanisms.
- **Substitution:** replace the hazard. Practically: Improve walking, public transport and cycling infrastructure.
- **Engineering:** isolate people from the hazard. Practically: segregated cycle lanes, barriers, bollards, planters.
- **Process:** change behaviour. Practically: public education / awareness, signs, enforcement.
- **PPE:** personal protective equipment. Practically: Hi-Viz, green barriers to shield people from pollution.

Eliminating vehicular traffic by prioritising the most harmful

Emissions from diesel vehicles are significantly more harmful than those from petrol vehicles. Petrol emissions are next in line for causing harms, and these should to be drastically reduced.

Further down the scale of harms are Electric Vehicles (EV). EVs should be a transport method of last resort owing to their negatives impacts from brake and tyre wear, and road dust, as does the danger they pose to pedestrians, particularly children and disabled people and those cycling. In addition, EVs like other private forms of travel consume high volumes of transport infrastructure owing to a continued requirement for road space and parking space. Provision of car clubs and cycle clubs should take precedence as alternatives to car parking for private motor vehicles.

We also need to distinguish here between electric cars and electric micro-mobility i.e. cars for people with disabilities, scooters, freight deliveries and public transport, where it is reasonable to substitute EV vehicles for diesel or fossil fuel alternatives.

Recommendations 4: End the current diesel contract for Southwark fleet vehicles and switch to EV as soon as possible. Swap EV for sustainable transport / freight. Revisit our procurement strategy to ensure subcontractors have EV or a sustainable fleet. Set a cut-off date for compliance so that subcontractors have time to make the switch.

Recommendation 5: Drive down total private vehicle usage over time so that by 2030 only a limited number of EV vehicles are in common use on Southwark roads. Set targets for yearly traffic volume reduction. Adopt a local target to halve petrol and diesel road journeys by 2025, and by 90% by 2030, and encourage London Councils and the Mayor to do likewise.

Recommendation 6: Support for the rollout of EV should be limited to

- Car clubs

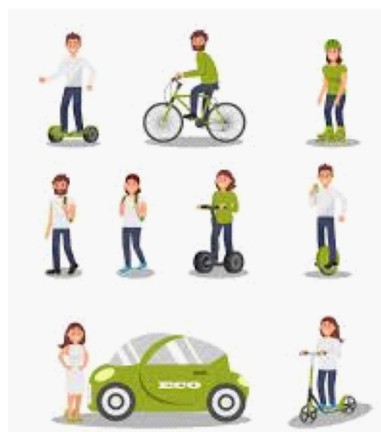
- EV Bicycles and scooters
- EV Commercial freight
- EV Public transport

Recommendation 7: Lobby the GLA to ensure delivery of ULEZ expansion in October 2021. At present, the ULEZ expansion is only planned to extend from its current boundary (the Central Congestion Charging Zone) to the south circular meaning that parts of Southwark will be excluded when it is due to come into force in October 2021. It is important that all parts of Southwark benefit from the ULEZ expansion and we should argue for the whole of the borough to be included.

Recommendation 8: Lobby the GLA to introduce Road User Charging as a matter of urgency. As the Centre for London July 2018 report on Road User Charging⁷ shows, road user charging is the most equitable way to allocate the use of road space across London.

Recommendation 9: The Movement Plan (M5 – Action 11) envisaged an expansion of timed closures in high footfall areas. We recommend seeing this come forward as a matter of urgency with locations where pedestrian footfall is extremely high being potential candidates for early action. Locations could include – Bermondsey St, St Thomas St between London Bridge Station and Guys Hospital and Elephant Road (E&C).

13 Alternative modes of transport



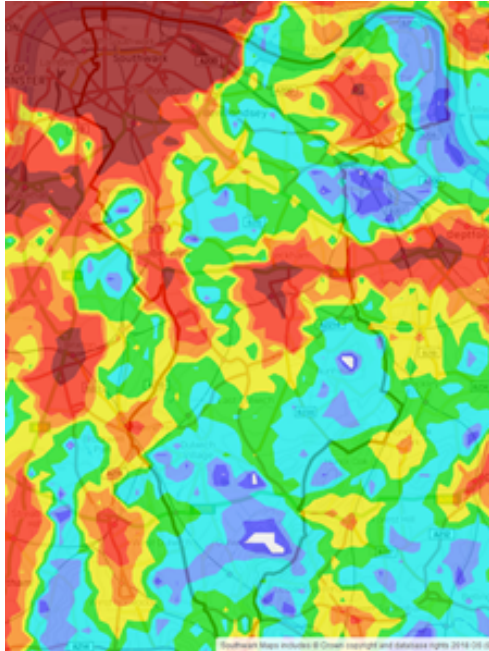
If we are going to reduce the number of cars on our roads we need to implement the right infrastructure to encourage more cycling and walking, as well provide support for more environmentally friendly transport options for businesses. Overall more investment is needed in public transport, cycling and walking, and these need to compliment Low Traffic Neighbourhood interventions mentioned above and in more detail below.

Public Transport

⁷ <https://www.centreforlondon.org/project/road-user-charging-london/>

As an inner-city borough, levels of public transport provision (as evidenced by PTAL ratings⁸) is very good in certain parts of Southwark, particularly the north and around central Peckham, Camberwell and Rotherhithe.

TfL has more work to do, however, to create a borough where it is easy to move around by public transport everywhere. More investment is needed along Southampton Way, Canada Water, Surrey Quays, the Camberwell/Peckham borders and Nunhead and Dulwich. See PTAL maps:



Southwark would also benefit from an extension of the Low Emissions Bus route programme in Southwark (from currently just the A202).

Recommendation 10

Lobby TfL to:

- Extend the Low Emission Bus route programme to include the Old Kent Road and New Kent Road, the A215 corridor (Walworth and Camberwell), Tower Bridge Road and the Newington Causeway/Borough High Street A3 corridor, London Road (E&C) and Rye Lane.
- Bring forward schemes that improve public transport in areas with poor air quality and poor PTAL provision in the central and northern parts of the borough.
- Promote bus and cycling only corridors (e.g. Rye Lane, Walworth Road). We should identify three ‘corridors’ such as this one and state an ambitious goal for them to be bus and car free in the near future).

Walking

⁸ <https://tfl.gov.uk/info-for/urban-planning-and-construction/planning-with-webcat/webcat>

Walking is an achievable, non-polluting way of getting about for most people, for most short journeys.

Katherine Jacobs, Living Streets advocated filtering out cars through the implementation of Low Traffic Neighbourhoods, which increase play, walking and cycling space. These can be introduced relatively easily through the use of chicanes, bollards, planters, bushes, trees and simple structures. Alongside the creation of Low Traffic Neighbourhoods, complementary measures are needed as a priority on adjoining main roads to ensure that traffic is not displaced on to them. Key to this is action to improve conditions for active travel and the use of public transport and reduction of car-based journeys (to facilitate conditions to create traffic evaporation), the creation of people friendly environments and indirect action to reduce the reliance on journeys by private motor vehicle such as reducing car parking provision and increasing car parking charges.

CYCLING

Cycling campaigners who gave evidence to the Commission emphasised that overall (taking into account road danger), cycling offers significant positive health benefits. To encourage a wider uptake, far more is needed to be done to increase actual and perceived safety especially for those taking up cycling

They highlighted perverse parking charges; currently it is common for cars to be charged in the region of £125 per year for a residential parking space, whereas a bike hanger is £48, despite the health benefits and low use of kerbside space.

Before lockdown and despite significant investment, cycling rates in Southwark have remained at under 5% modal share. Cycling campaigners advised that a major modal shift to cycling will only occur when infrastructure is delivered that includes LTNs, a network of connected cycle routes, protected infrastructure on main roads, widespread cycle parking and storage, low vehicle speeds and provision for cyclists at transport hubs.

This theory has been tested during the COVID-19 pandemic. Reduced traffic levels and safe, quieter roads have brought about a rapid modal shift, no doubt in part also driven by fears of contracting COVID-19 through public transport use.

The UK's bicycle industry says it has seen an "enormous" increase in the use and sale of bikes during the coronavirus lockdown. National and local retailers in the UK say they have seen a rise in orders both for leisure cycling and from those looking for a new, more isolated way to commute. Chair of the Bicycle Association Phillip Darnton told *Sky News* that the rise started shortly after the COVID-19 lockdown restrictions came into force that sales have risen by up to 40%. Stores owners say safety measures on the roads must be quickly introduced to ensure that the trend continues.⁹

⁹ <https://news.sky.com/story/coronavirus-bike-sales-surge-as-commuters-search-for-new-isolated-travel-11997757>

With the ending of lockdown, a growth in cycling will only be sustained in a significant way if we are able to radically reduce total car volumes through the use of the infrastructure changes mentioned, along with mechanisms such as road pricing, removal of parking spaces and increases in charges for parking and road use.

Recommendation 11: The council should make a commitment to repurposing 10% of kerbside car storage to cycle storage within the next 18 months. All new developments should provide a minimum of 2 secure cycle spaces per dwelling. Southwark should no longer grant car parking space in any new developments, other than Blue Badge.

Recommendation 12: Rollout secure bike storage in the tens of thousands, directly replacing car storage spaces and utilise bike storage as modal filters, where suitable.

We recommend that this is part of planned and integrated programme of bike storage:

- On roads.
- At Transport hubs.
- Near cargo bikes.

Recommendation 13: We recommend that Southwark adopts a maximum charge for bike hubs/hangers that ensures that is cheaper than car parking by space.

14 Waltham Forests Mini Holland scheme and Low Traffic Neighbourhoods



During the Commission, members visited the Waltham Forest Mini-Holland Scheme to discover more about how Low Traffic Neighbourhoods (LTN) are integrated with interventions on main roads.

Low Traffic Neighbourhoods (LTNs)

LTNs are groups of residential streets, bordered by main or “distributor” roads where “through” motor vehicle traffic is removed. There are many ways to create a low traffic neighbourhood, but the main principle is that every resident can drive onto their street, get deliveries and other vehicle based services, but that it is not impossible to drive through from one main road to the next by motor vehicle. With

through traffic removed, the streets in an LTN see dramatic reductions in motor traffic speeds too. It is not just the passing traffic that declines. While residents in an LTN can still do all their journeys by car if they want or need to, some trips will be a bit more circuitous. This, combined with far quieter, safer-feeling streets, enables residents to switch to more healthy ways of getting around, particularly for short journeys. Active travel has been found to increase in low traffic neighbourhoods by making car use less convenient, and active travel more attractive. By making some driving journeys a less convenient (while making other modes feel safe and comfortable), people switch modes, which contributes to “traffic evaporation” both on the roads in the LTN and on the surrounding main roads

Over the last five years LB Waltham Forest has also delivered more than 22km of protected cycle lanes, created 40 modal filters to prevent local streets being used by motorists as through routes, two part-time motor vehicle closures in local high streets, improved 100 junctions, trained more than 7,500 school children to ride a bike and 5,000 adults, planted more than 700 new trees and created 15 pocket parks.

Initially Waltham Forest ran into serious opposition to its schemes, especially during consultation over early elements, such as the creation of a LTN in Walthamstow Village, but there is now a broad consensus that these have been successful in improving the quality of life and health of the residents of the streets in question, and there is research evidence of “traffic evaporation” having occurred, although some aspects of this data is mixed.

Living Streets reported that the first LTN in Waltham Forest’s mini-Holland saw motor traffic levels fall by over half inside the residential area and by 16% even when including the main roads. Motor traffic levels declined by over 5% on the main road nearest the second scheme.

However, one weakness is the lack of data on air quality changes on main roads. Campaigner, Little Ninja pointed out during the March 2020 meeting that campaigners for side roads closures often refer to the Waltham Forest mini-Holland scheme as an example for traffic evaporation highlighting that there were only ‘slight’ increases to traffic on some of the roads that border the scheme of 3%, 11% and 28%. He said that when talking about a main road, these percentages equate to high volumes of traffic, congestion and air pollution on roads where many people live. The most negatively affected people are often from less affluent backgrounds. Similarly, the SE5 Forum have pointed out that main roads are places with residential communities and two of our major hospitals, that particularly need a reduction in air pollution and the associated noise pollution, are located in high traffic areas. Appendix 3 sets out their vision for Camberwell’s main roads.

One of the risks when implementing LTNs is that they do not take place over a large enough area to ensure that traffic evaporation takes place. If drivers can find an alternative route where levels of congestion are acceptable, they will continue to drive. If alternatives such as cycling are deemed unsafe due to a lack of protected cycleways or if there is insufficient space on public transport (as is the case at the

moment due to the need for social distancing) then motorists will continue to drive, increasing traffic congestion and air pollution on boundary/main roads.

LTNs also need to take place in conjunction with work to improve public transport (in particular in areas with low PTAL ratings) and cycling on main roads, as well as screening to reduce pollution in particularly sensitive locations such as schools.

In conclusion, the advantages of LTNs include a significant drop in local traffic volumes; implementation must, however, take place with complementary action to ensure that there are no increases in traffic levels on adjacent main roads.

Robust monitoring of traffic volumes and air quality is required, in conjunction with a programme to ensure that traffic volumes do not increase including: direct changes such as improvements to conditions to enable active travel (e.g. protected cycle lanes, extended bus lanes (and operating times), creating Low Emission Bus Zones and (in the longer term) support for Road User Charging as well as indirect measures such as increasing car parking costs and reducing car parking availability, car free development and the development of sustainable freight.

Recommendation 14: Introduce a borough wide programme of Low Traffic Neighbourhoods. These should be implemented:

- Over a wide enough area in order to realise the benefits of traffic evaporation, which has been shown to take place when there is a significant reduction of short journeys by car under 2km.
- As a priority in areas with high levels of public transport (high PTAL ratings), poor air quality, lower levels of car ownership, in areas of deprivation and where the programs would impact positively on local schools and hospitals.
- Where traffic may be displaced onto main roads, the council must monitor the impact on air quality, and mitigate negative effects in advance of implementation, possibly by widening pavements and creating cycle lanes, managing traffic to reduce vehicle idling time and introducing green screening programmes.
- In conjunction with the introduction of CPZ and a reduction of parking so the kerbside can be utilised for active travel and public realm improvements (such as pocket parks and cycle parking).
- In conjunction with improvements to Public Transport and other work on adjacent main roads to increase cycling and other forms of active travel.

15 Sustainable freight framework

Light goods vehicle traffic has risen by 30% in London since 2012 fueled largely by the explosion in internet-based shopping. These extra deliveries have added to traffic levels and air pollution with almost all of these vehicles having diesel engines.

Southwark is well placed to enable a large programme of sustainable freight. The borough needs to utilise that for internal contracts. This must also go much further,

there is a need to come up with policies to create sustainable & e-bike substitutes for home deliveries and delivery hubs.

Southwark is in a strong position to be a market leader in sustainable freight through with the presence of a large number of (e-) cargo delivery companies in the borough, large numbers of regeneration projects and BIDs to support their growth.

While the private sector is best placed to deliver these services, Southwark can play a valuable role by creating a Sustainable Freight Framework for home and commercial deliveries which includes:

Recommendation 15:

- Incorporating sustainable freight/delivery hubs into all regeneration projects – Old Kent Road, Elephant & Castle and Canada Water.
- Encouraging sustainable freight as part of other major town centre development schemes such as Aylesham Centre in Peckham, Butterfly Walk in Camberwell and the Morrison's site in Walworth.
- Incorporating sustainable freight into Low Emission Zone/Neighbourhood and Liveable Neighbourhood projects.
- Co-ordinating skills sharing between the BIDs and local groups interested in setting up sustainable freight centres.
- Enabling/supporting local click and collections hubs in town centres/local centres across the borough.
- Developing its LTN programme which will give a competitive advantage for cargo bikes which can pass through permeable filters whereas motor vehicles may be taking a more circuitous route.

16 Parking



It is important to shift public perception from parking as a fundamental right to one that is a public amenity. We need to fundamentally change the narrative, away from parking as a resident's right that comes with their house, to use of the kerbside,

which is a public amenity. The language we use should reflect that shift. We endorse a borough-wide Community Kerbside Zone.

We are concerned that parking continues to be provided in new developments and propose car-free (other than Blue Badge) development in Southwark with appropriate amendments to the New Southwark Plan (NSP) or Supplementary Planning Documents (SPD), as appropriate. Along with car-free conditions, the NSP/SPD should include cycle storage in all developments, e.g. at least 2 space per dwelling.

Southwark is ranked 26th out of the 33 London boroughs in terms of its net recorded surplus from parking revenue with parking revenue far lower than other Inner London boroughs such as Lambeth, Hackney, Islington, Camden, Tower Hamlets and Newham.¹⁰

The Commission attempted to quantify the amount of parking currently provided. Councillors expressed disappointment that the requested data showing parking spaces on street and on estates by ward was not available in time to include in this report. However independent research by the Commission sourced publically available data on car ownership by ward, postcode and borough (% of households with no car) which is a useful proxy for the parking data requested, to give a sense of the differences across Southwark and comparable boroughs, see appendix 2 for more information.

We recommend a reduction over time of parking made available and a move to emissions-based parking charges for residential and on-street parking charges but with a minimum parking cost to ensure no free parking for low emission vehicles. (Note: this may be a challenge in the current financial circumstances but we might explore a reduction in council tax for households without a car).

Residential parking charges should escalate for additional vehicles.

Recommendation 16: Increase the cost of car parking for all motor vehicles other than those of Blue Badge holders, with steeper increases for owners of diesel cars, vans and large vehicles and for residential parking for those households with more than one vehicle

Recommendation 17: Consistent with the Movement Plan, we recommend adding a cost to spaces and setting a target of a 5 % reduction per year in order to reach a goal of 50% reduction in parking over 10 years. We propose a consistent parking charging policy for our estates and the removal of free parking on them. This needs to be done alongside a borough-wide bike storage programme.

Recommendation 18: Introduce a borough-wide CPZ, renamed a Community Kerbside Zone.

17 Green screening and biodiversity

¹⁰ From the Centre for London Future of Parking report (2020)



As part of our parking space removal strategy, a proportion of removed parking spaces should be given over to greening / tree planting. This is to enhance amenity and to provide canopy cover as part of our climate change strategy. We should agree a target of trees to be planted by 2025 and the introduction of native hedges through the borough.

Key environmental benefits (“ecosystem services”) provided by urban vegetation, including hedges¹¹:

- Reducing flood risks
- Sequestering particulate and gaseous airborne pollutants as well as soil-borne chemical pollutants
- Reducing noise
- Providing habitat, shelter and corridors for wildlife
- Providing shade and transpiration air cooling.

Recommendation 19: A borough-wide greenery programme to use native hedges to screen to against air pollution, ecological planting and also improve the environment and place making. Examples include allotments and wildlife sanctuaries.

18 Vision and community



¹¹ <https://www.rhs.org.uk/science/pdf/climate-and-sustainability/hedges-for-environmental-benefits.pdf>

It is all in the vision

We need a positive and holistic vision of what a zero-carbon green Southwark will look like. We need to make it clear that by making fundamental changes to how we travel and live we will ultimately create long-lasting health and well-being benefits for the all the population of Southwark and beyond. Cities now need to be designed for people, not motor vehicles, and alternative forms of transport must form a key part of this. We need to change people's behaviour and perceptions. Infrastructure and technology are not enough; we need to create new social norms that enable more sustainable, low-carbon lifestyles. This change has started to happen through the COVID-19 pandemic. We have seen a substantial increase in bicycle usage and people have started to get use to a quieter and a more environmentally conscious borough.

Community support for change

Strong community support for change exists but there will inevitably be pockets of resistance that need courage and a good communication to overcome. An example is traders who were wary in Waltham Forest because of feared adverse impacts on their businesses. The reality was that the Low Traffic Neighbourhoods actually increased footfall and it was good for business.

Mums For Lungs emphasised the broad community support that exists to reduce air pollution, but more needs to be done to publicise the harms of air quality to build this further. To combat this, we need to assertively articulate a positive vision for change and have a borough-wide strategy which enables people to understand that they are part of a bigger change.

We must ensure we have a greater diversity of contributors from the community including those from BAME, deprived and main road communities. The language the council uses creates a false dichotomy between "residential" roads and "main roads" as most main roads are also residential. We must be particularly careful about appearing to create two classes of residents and must treat everyone's right to clean air equally. We should in future refer to side street communities and main road communities.

Southwark Voices Film

In order to capture the environmental changes seen through the pandemic we asked for residents to submit photographs and videos to capture the changes they witnessed since lockdown. Helena Smith, a photographer and filmmaker made a 25minute film and a shorter 5 minute version, exclusively for the environment commission called 'Southwark Voices'. She interviewed a cross-section of Southwark residents who have seen environmental changes over the last few months. Some of the key changes include: cleaner air, a cleaner river, quieter streets, more birdsong, more people cycling and a stronger community spirit. This film demonstrates that a greener borough is possible.

The 25 minute version can be found here: <https://vimeo.com/426827465>

The 5 Minute version can be found here: <https://vimeo.com/428298644>

In order to get people thinking about what people what a carbon zero green Southwark could look like in 2020, we have put together a day in the life of a local mother.

Southwark resident describes what it's like to live in Southwark in 2030

Leaving my house is now a pleasure: the once busy road is awash with walkers and cyclists. The noise from engines has been replaced by the chatter of families, friends and neighbours. The only cars you see now are electric buses and emergency services; to be honest I hardly notice them as they are so quiet. I am feeling much healthier and have lots more energy. I used to take the overcrowded tube to work. I'm a bit embarrassed to admit it now, but I was scared of cycling before as the roads were full of cars and I was worried about getting knocked off my bike. Now I cycle all the way into work in a designated cycle lane and there is a safe place to leave my bike at the end of my journey. The overall environment has really improved and many of the pavements are wider and lined with trees and plants that change with the season. I love the new linear parks, sometimes I forget that I am in the middle of a capital city!

My children are much happier too. It seems strange to think that parents used to pollute the roads where their children went to school with their gas guzzling cars. Now all you see is people walking and cycling. The school gates are a lot more sociable now, nobody is worried about parking and the air feels so much cleaner. My children now play on the street. Every Sunday all the children in my street get together and play together on the empty road.

I now spend at least half of my time working remotely. It is a definite plus as if my children need anything I'm just around the corner. I love supporting the local businesses in my area and often pop down to my local café during my lunch break; they always know what I am going to ask for: a nutritious plant based burger! I even feel safe walking alone at night because there more people out and about. My community has been totally transformed. I now say hello to my neighbours and I often help my elderly neighbour Stan with his shopping when he can't get out.

Recommendation 20: A new Air Quality public health focused communication plan is needed that highlights serious harms to health and which explains why Southwark will take a similar approach to banning smoking, e.g. borough-wide action to tackle Air Quality. It must clearly explain the benefits and the incremental changes that will need to take place, over a period of time.

Alongside this, we need to launch a public education programme similar to the stop smoking campaign on the damage that poor air quality does - particularly to deprived residents. [Note: this is ever more important in the light of COVID-19 and its disproportionately detrimental effect on deprived and BAME communities and those living in areas of poor air quality]. Urban mobility systems must ensure that goods, services and job opportunities are open to all.

19 Conclusion

It can no longer be acceptable for any transport schemes to be developed which cause increases in traffic volumes on other roads, particularly where there are vulnerable populations like schools and hospitals, and when we know those living in poverty, BAME populations and residents in areas of existing poor air quality are least able to cope with the effects of diseases like COVID-19

We must be driven with a proper scheme design: modelling the likely impacts of traffic interventions, understanding the communities who benefit and those who benefit least. This would mean an expansion of air quality monitoring throughout the borough with clear-eyed analysis of the outcomes. We need a proper understanding of where traffic is generated, who generates it and how it can be reduced; an understanding of car ownership volumes and consumption of street space. In all cases we need to gather sex-disaggregated data.

This committee recommends that, in conjunction with TfL and the GLA, the council prioritises the dramatic reduction of traffic volumes in the borough, through a combination of incentives for those who do not own cars, disincentives for those with a car and improvements to neighbourhoods.

This committee recognises the significant harm done by traffic emissions, and that this is a social justice issue. Those on low incomes are the least able to cope with poor air quality. Our strategic priority is the significant reduction in traffic volumes across the borough.

Our principles of social justice and a strong dataset will guide our interventions in a systematic way.

We should:

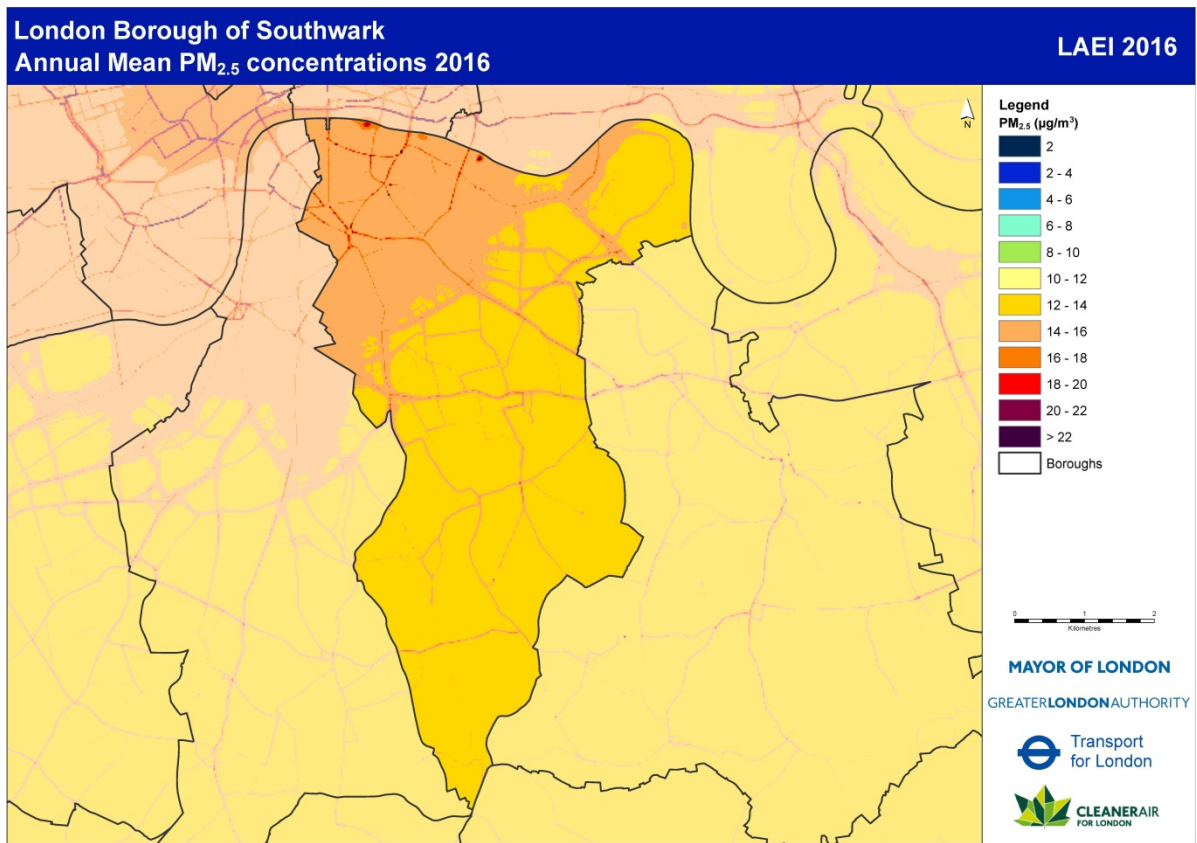
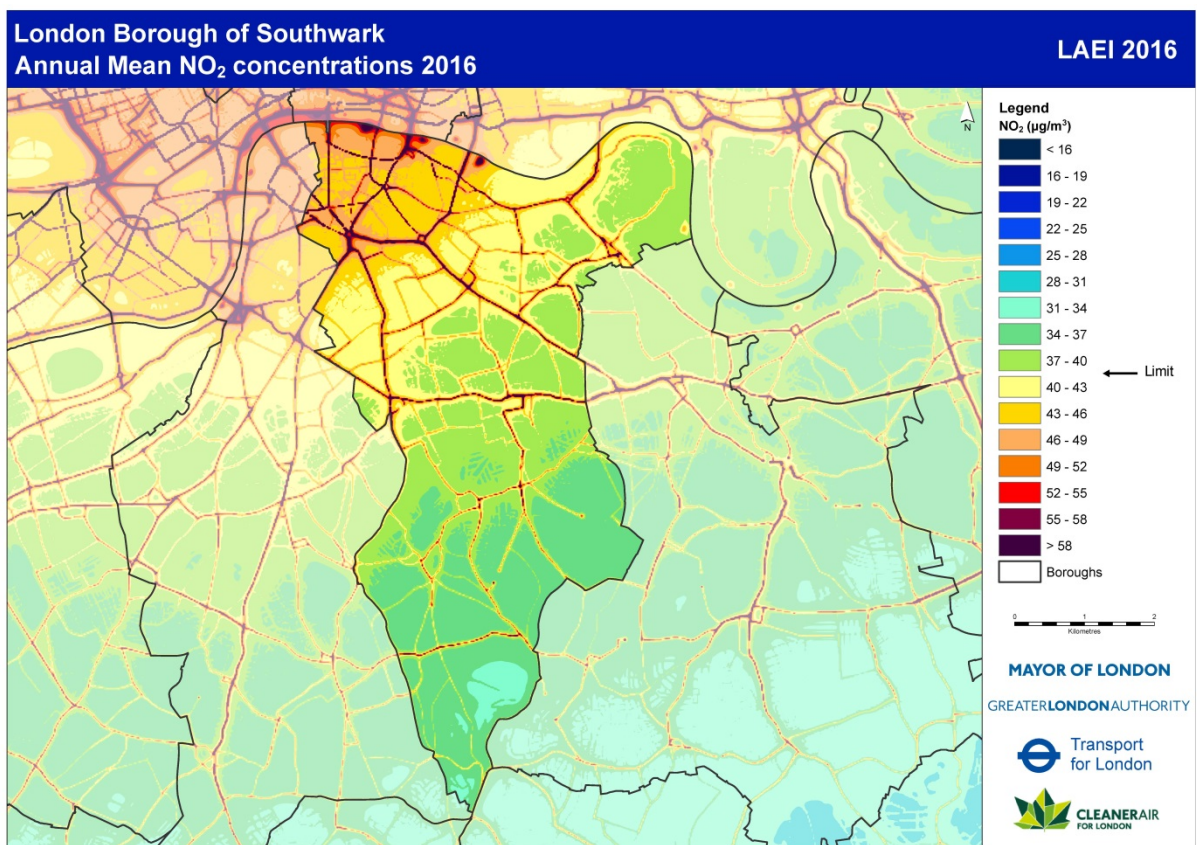
- prioritise those most in need and monitor all schemes for consequent harms, and where necessary, revise them.
- reclaim the use of the kerbside from parking for the few and instead transform it into a public amenity for the many.
- spend the next five years taking steps to making Southwark the cleanest and greenest borough in London.

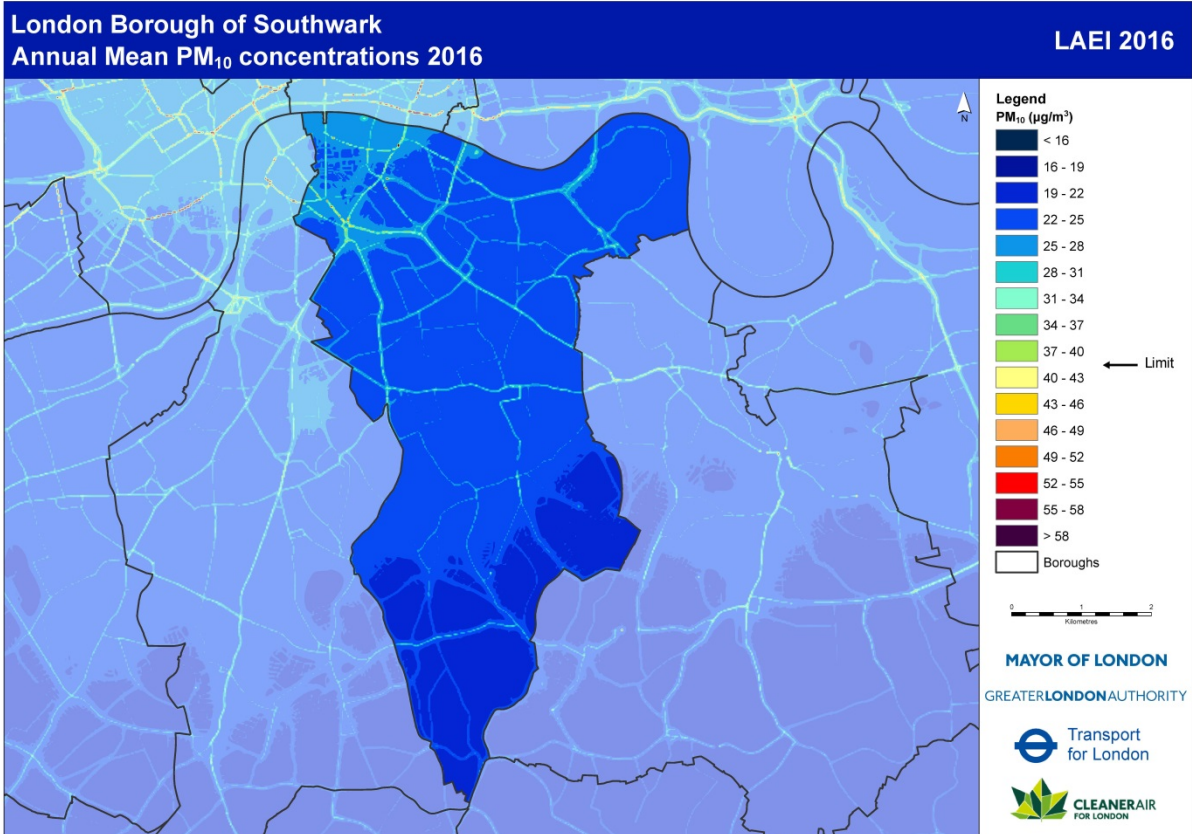
Southwark alone cannot deliver all the change needed by 2030. Much of the change needed in an area will require action by businesses, householders and others. And the government has a critical role, which includes giving local authorities the powers and resources they need to deliver to their full potential. Southwark Council should play a leading role in bringing key stakeholders together. An example is the Manchester Climate Panel a consortium set up by Manchester Council to work with 60 organisations across the city to share knowledge and leanings on ways to

address climate change challenges.¹² Having a strong communication plan is essential to be able to convey the positive benefits of bold climate action will have on communities across Southwark.

¹² www.manchesterclimate.com

Appendix 1 Southwark pollution maps: NO₂, PM 2.5, PM10.





1. 2011 Census data - Southwark By Ward - % of Households with No Car or Van access

NB 2011 Wards

	No cars or vans in household
E05000544 : Newington	69.1%
E05000535 : Camberwell Green	68.9%
E05000537 : Chaucer	68.7%
E05000540 : East Walworth	68.6%
E05000536 : Cathedrals	68.3%
E05000542 : Grange	67.4%
E05000541 : Faraday	67.2%
E05000543 : Livesey	64.0%
E05000546 : Peckham	61.4%
E05000549 : Rotherhithe	61.1%
E05000548 : Riverside	61.0%
E05000550 : South Bermondsey	60.6%
E05000534 : Brunswick Park	60.1%
E05000553 : The Lane	57.3%
E05000545 : Nunhead	57.2%
E05000551 : South Camberwell	51.3%
E05000552 : Surrey Docks	47.5%
E05000547 : Peckham Rye	44.0%
E05000539 : East Dulwich	41.5%
E05000538 : College	40.5%
E05000554 : Village	27.9%
Southwark - Average	58.4%
London - Average	41.6%
England - Average	25.8%

2. Car Ownership By Borough NB this is 2018 data on Car Ownership (Vehicle Licensing Statistics)

This is cars ONLY and is an estimate of cars per household. It is not (like 1 above) the % of households with no access to a car.

	Cars per HH
Tower Hamlets	0.34
Islington	0.34
Hackney	0.35
Camden	0.39
Westminster	0.43
Southwark	0.43
Lambeth	0.46
Kensington and Chelsea	0.54
Hammersmith and Fulham	0.55
Haringey	0.56
Wandsworth	0.59
Lewisham	0.59
Newham	0.61
City of London	0.70
Greenwich	0.71
Waltham Forest	0.76
Brent	0.79
Barking and Dagenham	0.81
Merton	0.89
Croydon	0.91
Enfield	0.91
Richmond upon Thames	0.92
Ealing	0.93
Barnet	0.95
Kingston upon Thames	0.95
Hounslow	0.96
Redbridge	0.96
Bromley	1.05
Sutton	1.05
Bexley	1.06
Havering	1.09
Harrow	1.15
Hillingdon	1.28
Inner London	0.51
Outer London	0.90
London	0.75
England	1.16

3. Car Ownership By Postcode NB this is Q3 2018 data on Car Ownership (Vehicle Licensing Statistics)

Again (as per 2 above) this is the average number of cars per household.

	Cars per HH
SE17	0.35
SE1	0.36
SE16	0.46
SE5	0.46
SE15	0.51
SE22	0.64
SE21	0.87

Camberwell's Main Roads: the SE5 Forum for Camberwell's Vision

The SE5 Forum for Camberwell

The SE5 Forum for Camberwell is a Camberwell community organization, with open membership, that works to improve Camberwell for the benefit of all members of our diverse community. The forum was set up to be the eyes, ears and voice of the Camberwell community, to see and understand what is happening within our area, to listen to concerns and to raise them with the relevant organizations.

Camberwell's Main Roads

Camberwell's main roads include the **A215** between Walworth and Herne Hill and the **A2216** between Camberwell and East Dulwich. The A215 runs along Camberwell Road, Camberwell Green and Denmark Hill, and includes Medlar Street linking from the A202 at Camberwell New Road. The A2216 runs along Champion Park and Grove Lane. The London Borough of Southwark is the highway authority and the traffic authority for both of these routes, except for the Camberwell Green junction (Camberwell Green/Denmark Hill/Camberwell New Road), which is managed by Transport for London.

Camberwell's main roads are often considered as being primarily routes for through traffic; but in reality they are not substantially different from other streets in Camberwell, being **residential** streets, **shopping** streets and the location of critical and sensitive sites such as **hospitals**.

Many Southwark **housing estates** are sited directly on Camberwell's main roads. Castlemead is on Camberwell Road; Champion Hill Estate is on Grove Lane; Champion Park Estate is on Champion Park and Denmark Hill; Denmark Hill Estate is on Denmark Hill; Elmington Estate is on Camberwell Road; Ruskin Park House is on Denmark Hill; and many other estates, such as Crawford Estate and Springhill Close, while not fronting directly onto the main roads, are extremely close to them and are also affected by the air and noise pollutants coming from the traffic on these main roads.

King's College Hospital is a large teaching hospital on Denmark Hill that serves a population of 700 000 people across Lambeth and Southwark but

also serves as a tertiary referral centre in many specialties for millions of people across southern England. The **Maudsley Hospital**, also on Denmark Hill, is a major psychiatric hospital and the largest mental health training institution in the United Kingdom. Both hospitals are very sensitive receptors for air and noise pollutants, with large numbers of patients whose health conditions and needs mean that they are the least able to cope with polluted and noisy environments.

Our Vision for Change

We want to see Camberwell's main roads benefit from much less motor vehicle traffic, and as a result to have significantly fewer air pollutants, especially particulates and oxides of nitrogen, and to be significantly quieter. Much more of the traffic on Camberwell's main roads should be pedestrians and cyclists. To achieve this our main roads should have:—

1. **Footways of a proper width**, with the capacity for safe and comfortable social distancing between people passing and overtaking each other and around people waiting at bus stops and to enter shops and other businesses and premises, and with space for street trees, plentiful seating and useful street furniture such as litter bins and post boxes. Footways will be a minimum of 4 metres wide, and wider where possible, particularly in the town centre. They will be the focus of the street's design, not the leftover space.
2. **Plentiful and direct pedestrian crossings** that allow people to cross the road where they want to, in a single stage.
3. **Protected facilities for cycling for all**, with protection for cyclists from motor vehicles and with enough space for cyclists to overtake each other comfortably and to cycle alongside each other at less busy times. Usually this will include segregated cycle lanes of at least 2.5 metres in width and, at signal-controlled junctions, early release signals with low-level repeaters and with advanced stop lines with waiting areas at least 5 metres deep.
4. **Bus lanes reserved** for buses and cyclists only at all times. No part-time bus lanes and no taxis or private hire vehicles permitted in bus lanes.
5. **Consistent capacity for motor vehicle traffic**, without excessive provision of turning lanes at junctions.
6. A **20 m.p.h. speed limit** that is enforced.

Second Environment Scrutiny Commission report on the Climate Emergency Strategy

July 2020

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Executive summary

On 27th March 2019 Southwark's Council Assembly resolved to call on cabinet to declare a Climate Emergency and do all it can to make the borough carbon neutral by 2030.

Cabinet agreed, and Southwark's commitment to adopt this ambitious target has been mirrored by a string of London boroughs and the GLA, instituting a movement for change that was first ignited by young people, including most famously Greta Thunberg.

The Environment Scrutiny Commission has taken an overview role in examining the emerging Climate Emergency strategy, which is due to come to the July 2020 Cabinet, scrutinising the focus, principles driving the strategy, themes, engagement process, and data.

The commission made a first report to cabinet in October 2019. This second report reflects on cabinet feedback to this first report and also takes a deeper dive into a number of issues, including:

- Local transport emissions (complimented by a longer Air Quality review)
- Planning, regeneration, and carbon offsetting
- Community Energy

The following points summarise the report's main conclusions on the requirements for the strategy:

- A strategy that sets out to address the ecological emergency as well as the climate emergency, and which aims to restore nature, not only limit the amount of carbon emitted.
- A strategy guided by our Fairer Future promises and the environmental principle of a Just Transition.
- A data driven strategy that maps emissions and consumption data and overlays deprivation data to ensure we deliver a comprehensive, effective and fair strategy.
- A partnership orientated strategy working with all sections of the community, including our citizens, voluntary and statutory organisations, and both large and smaller business partners.
- An engaging strategy, which ensures future generations and marginalised communities are prioritised.
- A transformative strategy, which sets out to change our transport system so that by 2030 the overwhelming majority of journeys are taken by foot, bicycle

and public transport and where a car, and other vehicular traffic, is the exception rather than the rule.

- A strategy that quantifies the carbon emissions and resources used in our borough's regeneration schemes and aims to rapidly move towards a low waste, low carbon, low ecological impact built environment, though building on our pioneering Great Estates programme, utilising the circular economy principles, and by adopting and implementing robust planning policies.
- A community focused strategy that brings Community Energy forward, by identifying all solar opportunities in the borough, starting with our local schools.

The coronavirus pandemic has shown us that governments can quickly implement socially unpopular policies in the interest of the public good and it shows that we can respond to a crisis when we need to. Society now needs to respond to the climate and ecological crisis with the same urgency and at the same comprehensive scale.

A blog published on EOS entitled 'Eight Lessons from COVID-19 to Guide Our Climate Response' quoted climate scientist Katharine Hayhoe: "The pandemic has shown that we are all part of an interconnected system. To care about biodiversity, to care about the integrity of our ecosystems, to care about our planetary boundaries and the limits on the resources we can use, and, last but not least, to care about climate change, the great threat multiplier, we only have to be one thing. And that one thing is a human living on planet Earth."¹

2 Summary of recommendations

Recommendation 1 The Climate Emergency is reframed to include the wider Ecological Emergency, with a commitment to work towards staying within safe Planetary Boundaries, and this shift is tested in the engagement process.

Recommendation 2 Include a strand in the strategy for Restoration, which includes increasing carbon absorption and improving the biosphere and link to present biodiversity plans.

Recommendation 3 Alongside this develop an action plan and work with other London councils and with Government to seek to secure the policies, funding and powers we need to restore nature nationally and, locally to stop wildlife habitats from being destroyed, managing land in a sustainable way that is sympathetic to wildlife and creating and caring for wildlife-rich spaces in every part of the city.

Recommendation 4 The final consultation on the draft strategy must overlay information on emissions and deprivation to enable people to make informed

¹ [Katharine Hayhoe](#), an atmospheric scientist at Texas Tech University in Lubbock.

responses to the strategy and the collective work of reducing emissions, underpinned by the commitment to an inclusive, fair and Just Transition.

Recommendation 5

- Map both emissions and consumption data.
- Map deprivation data and overlay this with emissions data to generate and prioritise the most effective actions that enable an inclusive, fair and Just Transition.
- Investigate digital twin AI technology.

Recommendation 6

- Engage with the Youth Council, youth environment groups , and other young people to set up an environment Youth Council.
- Engage with Eco Councillors in schools (primary schools are working remotely with more and more children attending).
- Early action to engage with communities that might not easily be able to engage digitally or where the climate change agenda has not featured people's views equally, including BAME, older and disabled people.

Recommendation 7 Engage with the local BIDS as part of the consultation strategy

Recommendation 8

- Adopt a local target to halve petrol and diesel road journeys by 2025, and by 90% by 2030, and encourage London Councils and the Mayor to do likewise.
- Develop an operational plan with partners to implement this focusing on structural changes, informed by the ambitions of the Movement Plan and its associated deprivation data.

Recommendation 9 The Commission is aware of the significance of the New Southwark Plan in relation to the delivery of Southwark's overall climate goals. The Commission is keen to ensure that Southwark delivers on its ambitions for both zero/low carbon growth and improvements to biodiversity through Supplementary Planning Documents and that these should be developed as a matter of urgency.

Recommendation 10 A focus on increasing 'on site' carbon emissions to at least 40% for major non-residential development and 100% for major residential development, through regular monitoring, in order to increase emissions delivered 'on site' by 25% each year.

Recommendation 11 Reduce embodied carbon and conserve resources in construction, by utilising the work of the London Waste and Recycling Board work on the Circular Economy and the Net Zero Carbon Buildings: A Framework Definition.

Recommendation 12 Include a policy on investment of Carbon Offsets in the Climate Emergency strategy, that is subject to consultation.

Recommendation 13 Ensure the price of Carbon Offsets can save a tonne of carbon (e.g. at least £90 per tonne and consider £120 per tonne).

Recommendation 14 Support community schools to adopt community energy, as a first stage in rolling out Community Energy.

Recommendation 15 Invest a proportion of our Carbon Offset funds into Community Energy, subject to consultation in the Climate Emergency strategy.

Recommendation 16 Set out a plan for mapping and identifying viable PV sites in Southwark, starting with community schools

3 Background

On 27th March 2019 Southwark's Council Assembly resolved to call on cabinet to declare a Climate Emergency and do all it can to make the borough carbon neutral by 2030.

In order to take this forward a Climate Summit was held in July 2019, attended by councillors, officers and community representatives. The Environment Scrutiny Commission received an update on this event shortly after.

On 1 October 2019 Councillor Richard Livingstone, Cabinet member for Environment, Transport and the Climate Emergency, with the support of officers, presented the Climate Emergency Strategy draft road map to the Environment Scrutiny Commission. The Commission discussed the plan and also heard from Councillor Adam Harrison, Cabinet member for a sustainable Camden, who spoke about the wider engagement work of the council, Camden's Citizens' Assembly, and Extinction Rebellion, who recently gathered views from Southwark residents.

Following this the Commission sent a report for cabinet to consider alongside the final Climate Emergency Strategy road map, which went to cabinet on 29 October.

The Commission continued to take evidence on the Climate Emergency over the next three meetings, as well as receive evidence on the other complimentary review on Air Quality. These interlinking issues were considered at the 4 December, 20 January, 10 March and 17 June meeting:

- Planning, Regeneration and the built environment
- Transport and the local physical infrastructure to support a transition to lower emissions
- Community Energy
- Impact of Covid 19 on highways and transport policy
- Carbon Offset

On 10 March the Commission received another update on the Climate Emergency strategy development, which was intended for the Cabinet meeting of 24 March; however, the pandemic measures put in place on 23 March meant this did not go ahead. Instead a virtual rescheduled cabinet meeting was held on 7 April, and this received an amended version of the report with a Coronavirus addendum setting the intention to change the engagement plans. The cabinet accepted the report recommendations; however, the revised engagement plans were 'called in' by OSC on 12 May.

The 12th May Overview and Scrutiny Committee (OSC) held the Call-in of the 7 April 2020 cabinet report: Delivering a Climate Strategy for Southwark. Concerns centred on the addendum to the report which outlines the reduced engagement following the announcement of pandemic and the intention to move more engagement post the development of the draft strategy. The OSC resolved not to refer the report back to cabinet; however, it did make a number of recommendations on the engagement programme which were broadly accepted by the lead cabinet member, Cllr Livingstone. The following commitments were made to take place leading up to the July cabinet meeting, when the Climate Emergency Strategy report will be considered:

- Online Hub – the council has commissioned and launched an online portal and a report will be produced on the interim findings at the time of the July council report
- Partnership Steering Group – will reconvene virtually to meet monthly between now and July
- Members Working Group – will be established

Consultation with young people and concerted efforts to reach the BAME community, young and older people will be undertaken post July.

3 Context

The start of 2020 has seen several global environmental crises linked to climate change and environmental degradation: the bush fires of Australia, the warmest January globally, the wettest February in UK, and most disruptive of all, the COVID 19 pandemic.

COVID 19 has been difficult and often tragic for most human societies, whereas for nature it has been a mixed blessing. In some places we are seeing a resurgence of flora and fauna, with sheep invading Welsh towns, and people in cities getting a welcome glimpse of cities with reduced air and noise pollution. The slower, quieter pace of life has improved many people's ability to enjoy nature, from the ability to hear bird song to the awareness of the slow change of trees coming into blossom.

The global lockdown has seen significant reduction of fossil fuel use and the spectra of oil prices going negative, and there has been a drop in the consumption of most consumer goods. At the peak of population confinement emissions dropped by 17%

over 2019 mean levels.² However the pandemic has also seen a rise in some consumables, with an increase in medical plastic waste from PPE and single use face masks and gloves that is already posing a risk to wildlife.

While the total overall reduction in the consumption of resources is likely to slow climate change and have other environmental benefits, the adverse economic consequences and impact on humans are likely to be severe.

There will be some opportunity to adopt post-adopt lockdown practices longer term, and the obvious ones to sustain are remote working, and consequent decrease in transport, and the uptake in cycling and walking journeys.

In rebuilding our economy post COVID 19 the UN Environmental Panel recommend 5 design principles for member states, however many of these will apply to local government:

- 1) The centrality of “green and decent” jobs and income;
- 2) Investments in public wealth and social and ecological infrastructure (‘public money for public goods’);
- 3) Circularity to advance sustainable consumption and production;
- 4) Responsible finance for climate stability and ecosystems integrity; and
- 5) Socially inclusive outcomes

The pandemic has rightly seen resources switch to safeguarding life locally, however the Climate Emergency remains just beyond the horizon and disruption of life under COVID 19 is a spectra of the future if we do not continue to do everything we can to avert us from the disastrous path towards the 3-4% degrees of climate change that we are presently headed towards, unless we manage to make the systemic and far reaching changes that are required.

4 Climate and Ecological emergency

In the first scrutiny report to the cabinet the Commission recommended that the Climate Emergency also incorporates work on the wider ecological emergency. This recommendation was echoed by the Partnership Steering group, convened to inform the emerging Climate emergency strategy, who also recommended considering broadening the strategy to an “ecological emergency” as well as a climate emergency. If Southwark were to do that it would put us on the same footing as the

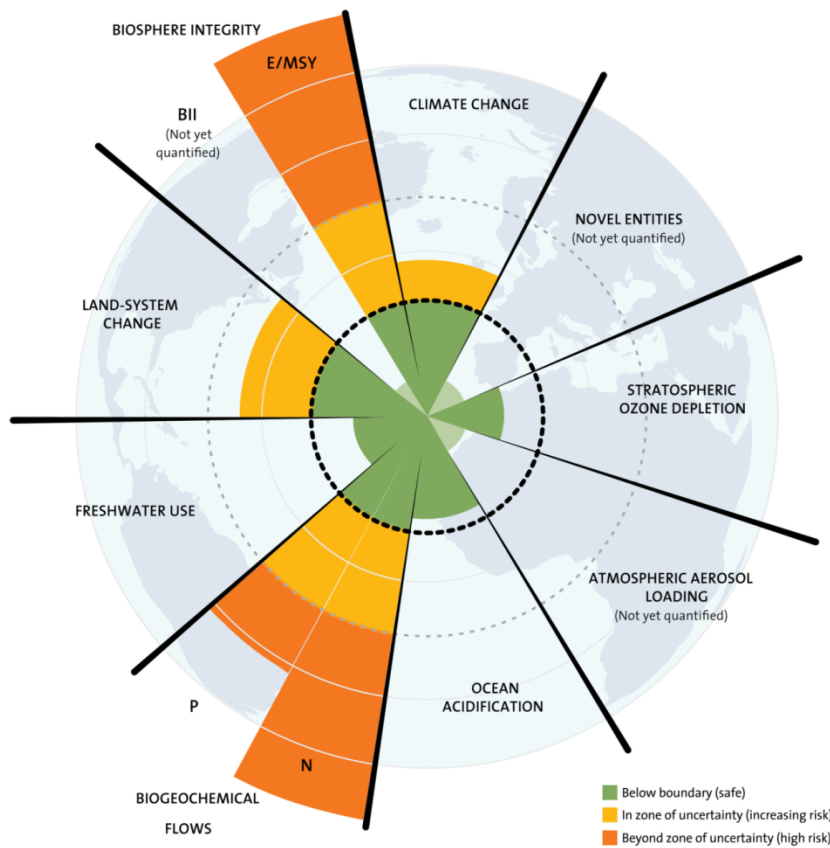
² <https://www.uea.ac.uk/about/-/covid-19-crisis-causes-17-drop-in-global-carbon-emissions>
The study published in the journal Nature Climate Change shows that daily emissions decreased by 17% – or 17 million tonnes of carbon dioxide – globally during the peak of the confinement measures in early April compared to mean daily levels in 2019, dropping to levels last observed in 2006

many of the other Local Authorities who declared both a climate and ecological emergency.

There are good reasons for looking at the boarder ecological emergency at the same time as the Climate Emergency. Environmentalists are increasingly looking at the linkages and interdependences between climate change, land use change, loss of habitat, chemical flows, soil depletion and reductions in biodiversity.

Zero Carbon Britain's report on responding to the Climate Emergency recommends The Stockholm Institute's influential work on Planetary Boundaries. This work defines the ecological boundaries that we need to remain within to for a habitable world.

Presently this work estimates that we have already exceeded the planetary boundary for loss of biosphere integrity; biodiversity loss and extinctions. The main drivers of change are the demand for food, water, and natural resources, causing severe biodiversity loss. The other boundary that has been crossed is nitrogen and phosphorus flows to the biosphere and oceans, as a result of industrial and agricultural processes.



Negative changes impact on each domain, but positive changes also build resilience. Modern research is showing the huge capacity for the biosphere to absorb carbon, and biodiverse regions are more resilient to climate change.

Recommendation 1 The Climate Emergency is reframed to include the wider Ecological Emergency, with a commitment to work towards staying within safe Planetary Boundaries, and this shift is tested in the engagement process.

5 Restoration

Increasingly environmentalists are saying that restoration has to be part of the plan if we are to achieve carbon zero. Trees and soil have an enormous potential to absorb carbon and if we are to reverse biodiversity loss we cannot just conserve, we need to restore. Centring restoration is an emerging approach that is gaining credence but is less familiar than carbon reduction. Soil can hold four times the amount of carbon than in the atmosphere. Vegetation can protect citizens from the adverse impact of emissions on highways.

The FOE plan, which is referenced in the Climate Emergency strategy, recommended that council land is used to drawdown carbon (e.g. tree planting and soil carbon management). There are possibilities here in both green spaces in parks, and alongside roads and other green spaces in urban settings. These can all make both a positive difference in carbon emissions and increasing biodiversity. Many local authorities now produce green infrastructure strategies.

Centring protecting the biodiversity and ecology of Southwark is also likely to increase social commitment and drive positive behaviour change as research shows that people care, on average, more about loss of flora and fauna, than climate change (though there is a rise in concern about both). The huge concern about loss of bees and rise in gardening that protects wildlife demonstrate the community strength on feeling.

It must be noted that action is needed at all levels, from central Government, through to local partnerships and communities and individuals.

The council should work with partners and other stakeholders to set out the actions that the council and partners will take to support and add to the existing initiatives which are already taking place.

Recommendation 2 Include a strand in the strategy for Restoration, which includes increasing carbon absorption and improving the biosphere and link to present biodiversity plans.

Recommendation 3 Alongside this develop an action plan and work with other London councils and with Government to seek to secure the policies, funding and

powers we need to restore nature nationally and, locally to stop wildlife habitats from being destroyed, managing land in a sustainable way that is sympathetic to wildlife and creating and caring for wildlife-rich spaces in every part of the city.

6 Leadership statement, principles and data driving the engagement and emerging strategy

In the first report the Commission recommended that the engagement process start with a leadership statement from the council about the Climate Emergency and the council's approach to environmental stewardship. It was recommended that this outlined how fossil fuel burning, vehicle emissions, a denuded environment, loss of species, all contribute to the climate emergency and why it matters for our borough, city and planet. The Commission advised that this statement, and subsequent distribution and education in the borough, should be implemented before the rounds of engagement detailed below, to ensure we have the best input from our communities.

It was recommended that as well as outlining a clear position the statement should additionally overlay some of the wealth of information we have (council tax bands, indices of multiple deprivation, car ownership, road causality rates, air quality etc.) to fully understand who in the borough experiences the benefits and who suffers the most from our environmental actions and to integrate the principle equality, fairness and climate justice.

There the cabinet report back contained a very positive endorsement of the leadership statement; however, the timescale for the production of this is unclear.

On principles the second cabinet report said the Fairer Future principles would be used, which makes absolute sense. In addition to this, under the 'Inclusivity' section, there was commitment to a Just Transition, and although there was not explicit endorsement of the principle of Climate Justice, put forward by the Commission are in effect very similar principles.

Just Transition is a framework developed by the trade union movement to encompass a range of social interventions needed to secure workers' rights and livelihoods when economies are shifting to sustainable production, primarily combating climate change and protecting biodiversity. The Paris Agreement requires parties to increase action to reduce greenhouse gas emissions while taking into account "the imperatives of a just transition of the workforce and the creation of decent work and quality jobs".

There was a further discussion on mapping out data on deprivation at the meeting on 10 March, where the Climate Emergency Director gave assurances that this was the intention.

An online survey was launched late May and this does contain an opening statement setting out the councils ambitions. This could be further improved when the draft strategy is launched for consultation with more information on carbon emissions and the relationship with deprivation.

Recommendation 4 The final consultation on the draft strategy must overlay information on emissions and deprivation to enable people to make informed responses to the strategy and the collective work of reducing emissions, underpinned by the commitment to an inclusive, fair and Just Transition.

7 Baseline data

In order to bring the commitment to a Just Transition to life and ensure an equitable transition the Commission recommend that the links between social and environmental justice are mapped, as set out above.

Baseline data will be extremely important to understand, target and measure the implementation of measures to reduce and absorb emissions.

Data on Carbon should include both emissions and consumption. It is welcomed that the joint work with London Councils intends to focus on reducing the consumption of food, clothing, electronics and aviation. The Commission welcomes the survey theme on consumption and the commitment to address this as a theme in the strategy.

A net zero carbon reduction programmes that omits to systematically address consumption will mean that a large part of Southwark's contribution to Climate Change would go unaddressed. Research by Leeds University shows consumption emissions make a significant part of the UK carbon budget – see more here:

<http://www.emissions.leeds.ac.uk/>.

Digital twin in the context of a smart city

A method for bringing this information together to make intelligent choices is to utilise the 'Virtual Twin' AI programme, where the borough's data can be inputted, and recommended actions generated and prioritised based on cost and impact.

A digital twin of a building, a group of buildings or even a neighbourhood that delivers 3D models that reflect real-life performance, and which can deliver energy resilience, cost savings, resource efficiency and, most importantly, decarbonisation of buildings, campuses, communities and cities.

To create a digital twin of elements in an urban neighbourhood for example, a library of devices such as transformers, streetlights, energy meters, solar panels, EV chargers and bus and rail systems is necessary. Each urban "twin" is programmed to behave as its physical counterpart using such a system. A neighbourhood planner can then conduct "what if" scenarios to optimize conditions i.e. traffic flow, pump

efficiencies, grid resiliency improvements and see the potential impact of these assets on existing and planned infrastructure elements. Once assets are deployed, the digital twin platform serves as an operational tool to monitor and service the area.

Recommendation 5

- Map both emissions and consumption data.
- Map deprivation data and overlay this with emissions data to generate and prioritise the most effective actions that enable an inclusive, fair and Just Transition.
- Investigate digital twin AI technology.

8 Engagement

On the Borough wide engagement process warmth was expressed to the practical suggestions made in the first report, however few commitments were provided. The pandemic has further necessitated the need for a detailed programme of engagement. The Commission is pleased to see that an online questionnaire has been initiated, and the Cross-Party members' groups will shortly be convened.

The 17 June Commission meeting received an update on the Partnership Steering Group, which met the evening before on the 16 June. The Commission heard that the Partnership Steering Group had a well received presentation on the engagement plans, which will be delivered by Traverse. There will be a dedicated strand to engage with young people, which is welcome.

The Commission is convinced that an Environment Youth Council ought to be convened. A broad range of young people need to be engaged, including Southwark's Youth Council, given their democratic mandate in Southwark, the adverse impact on future generations of environmental degradation, the pre-eminence of young environmentalists like Greta Thunberg and the school strike movement, in driving the environment up the agenda.

There is an excellent Eco Councillor movement in schools that would allow for easy engagement and the council should make the most of this network.

The Commission also think that work with more marginalised groups ought to happen sooner rather than later.

Recommendation 6

- Engage with the Youth Council, youth environment groups , and other young people to set up an environment Youth Council.

- Engage with Eco Councillors in schools (primary schools are working remotely with more and more children attending).
- Early action to engage with communities that might not easily be able to engage digitally or where the climate change agenda has not featured people's views equally, including BAME, older and disabled people.

9 Partnership and strategy

The Cabinet report outlined strong partnership work with London councils, and good local engagement with local green campaign groups. The Commission would like to see more engagement with wider strategic bodies such as the GLA, TfL, as well as the business community, particularly the local Business Improvement Districts (BIDS).

There are several low carbon freight initiatives that the London Bridge BID are supporting, such as Peddle Me, which offer the opportunity for Southwark to be at the forefront of moving to low carbon commercial movements .

Recommendation 7

Engage with the local BIDS as part of the consultation strategy.

10 Moving to a sustainable transport system

One of the biggest potential levers the councils have on emissions is through its transport plans, particularly if partnerships can be built with other London boroughs and the Mayor of London, as the lead for TfL.

The first scrutiny commission report recommended a target to drive down car use and the April Cabinet report set out a target agreed with other London boroughs to halve petrol and diesel road journeys by 2030 and incentivise sustainable and active travel options. A concrete target is welcomed; however, we think this ought to be more ambitious over a shorter time period.

The commission revisited the Movement Plan at the March meeting where some local initiatives were presented, alongside big ticket changes planned for the Old Kent Road. While the Commission welcomed these, on the whole, there was concern that the operational activity to deliver the good ambitions of the Movement Plan lacked a coherent programme. The Commission discovered deprivation data sitting behind the plan, but this was not referred to by the officers in the meeting and there was no evidence that this is being used to drive decisions in a systematic way.

The risk is that pockets of good practice will emerge in places with the most vocal activists or large scale regeneration, but these will not necessarily be the places with the greatest need or deliver the local changes people most want. Furthermore, hyper local changes are most likely to drive unintended outcomes of displaced traffic, rather than the win/win outcome of traffic reducing overall. More work needs to be done to implement Low Traffic Neighbourhoods over a broader area and in conjunction with TfL work on major roads and aligned with plans to increase public transport and active travel.

The recent announcement by the Mayor of London that main streets in the city, including between London Bridge and Waterloo, will only be open for buses, pedestrians and cyclists, is a welcome response to the pandemic. He has asked local councils to close minor roads. An initiative such as Low Traffic Neighbourhoods would be complimentary to this initiative and enable citizens to sustain the increased walking and cycling witnessed during lockdown. Measures will need to be taken to ensure people with mobility problems are catered for.

Recommendation 8

- Adopt a local target to halve petrol and diesel road journeys by 2025, and by 90% by 2030, and encourage London Councils and the Mayor to do likewise.
- Develop an operational plan with partners to implement this focusing on structural changes, informed by the ambitions of the Movement Plan and its associated deprivation data.

11 Regeneration and Carbon Offsetting

Regeneration, carbon emissions and resource use

Globally, building emissions and their construction, together account for 36 percent of energy use and 39 percent of energy-related carbon dioxide emissions annually, according to the United Nations Environment Program. The figures for Southwark may well be higher, and this is something that should be quantified in the data report expected.

Building emissions are a combination of two things. First there is the day-to-day energy use, the ‘operational carbon emissions’, which refers primarily to fuel and power use of the completed building. The second is the amount of carbon generated through manufacturing building materials, transporting materials to construction sites, and the actual construction process—what is known as the ‘embodied carbon’ of a building.

When buildings are designed the ‘operational carbon’ is measured and governed by 2013 Building Regulations Part L. The draft New Southwark Plan requires a 100% reduction for major residential development and a minimum of 40% reduction for non-residential development on the 2013 standards . This must be delivered ‘on-

site', however where this does not happen a financial contribution is required from the applicant to meet the target and is used for Carbon Offsetting.

The second measure of carbon expanded is in the construction process, or 'Embedded Carbon'. This is not however governed by law or current policy framework, although there are stops being taken to address this. Extinction Rebellion highlighted this weakness and that currently emissions created by constructing the new building (or demolishing the buildings that were there before) are not currently measured even though construction and maintenance can account for more than 50% of carbon emitted through the lifetime of a building³.

Constructing buildings creates significant amounts of carbon emission, and there is also the related issue of the huge amounts of waste generated by regeneration; 48% of all waste in London comes from construction, excavation and demolition.⁴

Construction not only impacts on carbon emissions, it also impacts more widely on our ecology through the use of virgin materials (wood, mined minerals etc.) which will drive land use change and put pressure on other Planetary Boundaries.

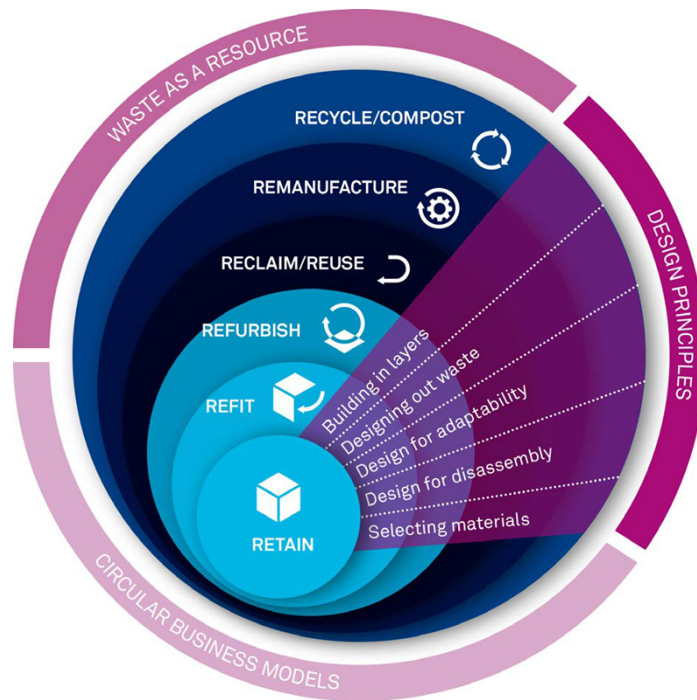
The Commission considered two emerging and related approaches to the problem of reducing carbon and conserving resources through the whole life cycle of a building.

The first approach is outline in the Net Zero Carbon Buildings: A Framework Definition. This report is intended as a first step towards delivering buildings that are in line with the aims of the Paris Agreement – namely net zero carbon across the whole life of a building, both operational and construction / embodied carbon. The framework has been developed by an industry task group of businesses, trade associations and non-profit organisations. The approach emphasises transparency and accountability and the use of offsets to address embodied carbon.

The second approach examined was the London Waste and Recycling Board report: London's circular economy route map. The section on Buildings recommends a whole life approach to reducing the carbon and other material used in construction by increasing the ability to retro fit, refurbish, reuse or recycle:

³ Leeds University 2017

⁴ Page 17 London's circular economy route map



Above: Building Revolutions: applying the circular economy to the built environment, David Cheshire (AECOM), RIBA, 2016

Ref: Building Revolutions' (2016), David Cheshire, RIBA Publishing

This circular approach is in line with the UN recommendations on the environment and has the potential to drive the deep structural and systemic changes in our economy which will be needed to stay within Planetary Boundaries.

Embedded carbon is a huge part of our carbon emissions originating from small scale building and our larger regeneration schemes. Officers indicated there are no planning requirements on this because wider planning law does not measure embedded carbon. This is a major challenge.

Regeneration officers seemed alive to this issue and indicated that they are considering the whole life cycle of carbon and brought the Commission's attention to regeneration initiatives that reuse existing buildings. The planning policy report to the Commission in January outlined the Building Research Establishment Environmental Assessment Methodology (BREEAM) ratings used, which are the industry standard for sustainable design and construction. Officers said that they will continue to push for all new buildings in the borough to meet an 'Excellent' BREEAM rating so that these buildings are sustainably built and to ensure that they contain adequate insulation and ventilation.

In addition to the above the Cabinet Member for Social Regeneration, Great Estates and New Council Homes has been leading on addressing the embodied carbon and resource impact of council led regeneration in the new council homes programme and on our estate. This is focused on delivering additional environmentally friendly homes for rent that are low waste and low impact, and ensuring new developments

deliver ecological and environmental improvements for everybody through the Great Estates programme.

Schemes are also looking at utilising timber products to reduce the huge amounts of embodied carbon in cement and steel; every tonne of cement releases 900kg of carbon and every tonne of steel 1,000kg. The use of timber is more established in Europe, and to there are planning and sourcing challenges to overcome in the UK, which the council is lobbying central government to resolve, and as well as seeking a partner to undertake commercial forestry.

The council is presently seeking a construction partner and delivering on the councils ecological ambitions will be a key priority for the construction company.

These are some of the measures being taken to deliver low waste and low impact council homes:

- Bringing forward construction using low impact materials and implementing low ecological impact forms of development (rooftop development, waterways development)
- New Homes Design Guide requirements
- Nature recovery plans, biodiversity measures of new habitat development, including increase in tree canopy coverage
- Bringing forward low embodied energy development (first projects due on Woodland Road, with more due at Fendall Street, Maltby Street, Ann Moss Way, Rotherhithe Old Road)
- Establish a technical pathfinder towards carbon negative operational energy with an initial target of EPC ratings of A and B for all new developments. This will include incorporation of new heat store, energy management and renewable technologies. Later on there will be a move to Passivhaus standard.

The Great Estates programme will include the following:

- Allotment expansion guarantee . Rolling out secure food growing plots where residents can provide a maintenance plan, basic water source and tools. Over 200 have already been identified on the 7 'pilot' estates. There will be Commonplace exercises to help establish demand for remaining 253 estates. This will link in to food security work.
- Two community gardening coordinators now recruited to roll out allotment programme, wildflower planting, estate-based tree planting programme,

enabling new community gardening groups and strengthening existing networks.

- Partnership work with London Wildlife Trust.

The above are all significant steps towards delivering low impact and ecologically friendly new council homes and improving our Great Estates. Given the significance of the carbon and other resources used in regeneration, and the (imperfect) leverage the Council has through the planning process this is an area with some good emerging work, but is also an area that needs more focus. This is especially so for external regeneration initiatives, particularly as the legislative framework is almost exclusively focused on operational carbon, rather than the whole lifecycle of the resources used in construction. Carbon in building schemes will be a huge part of Southwark carbon budget up to 2030, both the embedded carbon generation through construction and the emissions from planned new buildings.

The planning officers' report to the Commission outlined a number of environmental and transport policies that will impact on the environment , with reference to the New Southwark Plan, these are:

- Strategic Policy 6 Cleaner, Greener, Safer
- P68 Sustainability standards
- P69 Energy
- P64 Improving air quality
- P48 Public transport
- P49 Highways impacts
- P50 Walking
- P51 Low line
- P52 Cycling

In addition to the above there is a programme to bring forward an action plan to respond to the Climate Emergency, which will run in parallel to the public inspection process for the draft New Southwark Plan. This may lead to a Supplementary Planning Document (SPD). The Commission endorses this process and considers an SPD will be necessary to accelerate our work on reducing carbon and protecting the environment.

The 7 April report on the Climate Emergency report outlined steps agreed with London Councils that that will be taken in conjunction with other London Boroughs, and these include:

- Low-carbon development: Secure low carbon buildings and infrastructure via borough planning. Programme timescale: 2020 – 2022
- Reduce consumption emissions: Reduce consumption emissions by two thirds, focusing on food, clothing, electronics and aviation. Programme timescale: 2020 – 2030

These are welcome steps; however, it is unclear if this work will encompass joint working to drive down embodied carbon and other resources used by the construction industry through development.

Carbon Offsetting

In the Commission's first report a recommendation was made to a) eliminate or drastically reduce its use and b) ensure any offsetting funds are used effectively and produce an annual report. Cabinet thought Carbon Offsetting ought to continue but agree this ought to be reduced.

Officers said that the draft New Southwark Plan (NSP) increases the amount of operational carbon to be addressed 'on site' to 40% for major non-residential development, subject to the Inspector agreeing to this. Currently, the London Plan requires non-residential development to achieve a 35% reduction. This new 40% target is one which most boroughs in London have now adopted. This will require major developments in Southwark to exceed the Mayor's target by 5%. Officers said that currently buildings achieve 34 % on average and on occasions as high as 70%, so they know the 40% target is achievable. Major residential development must meet a 100% reduction.

If we are to address Climate Change effectively, generally environmentalists consider that carbon offsetting ought to be reduced to zero or as close to zero as possible.

Extinction Rebellion were critical of 'net' zero as a concept, as this allows new building to pay to pollute long into the future, and can give the impression that initiatives are much greener than they actually are. They critiqued the Elephant Park, formerly the Heygate estate, as an example. They told the Commission that this development was initially touted as a flagship environmental project incorporating a new 100% renewable energy plant and that the developer, Lendlease, decided that this was not financially viable and were permitted by the terms of their planning application to simply convert the carbon reduction targets that would have been achieved through renewable energy into a recalculated offset payment. Officers clarified later that the 100% renewable energy programme referred to by Extinction Rebellion was the council's proposal for a Multi-Utility Services Company (known as MUSCO). The MUSCO proposal was initiated by the council to deliver a decentralised low carbon heat, non potable water and a fibre network . The low carbon heat element was to have taken the form of a biomass CHP using waste wood to generate heat and hot water. In 2011 Cabinet, as opposed to Lendlease, chose not to proceed with this proposal as the council could not be satisfied that the commercial structure was sound or offered value for money. In addition, there were concerns about the environmental impact of the scheme which would have required frequent deliveries of waste wood to the biomass CHP and the sustainability of waste wood as a fuel source. That development will now generate just 3% of its

energy needs through solar panels and the rest through fossil fuels. The increased offset payments mean that it is still described as 'zero-carbon'.

Officers agreed it is better to meet energy targets 'on site' and assured the Commission they will be reviewing practices. The above illustrates some of the challenges. At the January meeting officers said that they are also considering doubling the amount of carbon charged, i.e. increasing the amount developers have to pay.

During a follow up briefing and discussion on Carbon Offsets at the 17 June meeting the Cabinet member reiterated that emphasise on encouraging carbon to be dealt with 'on site'. He also highlighted the importance of ensuring that where this cannot be done that the right price is set to ensure that the carbon offset fee is sufficient to ensure a tonne of carbon can be saved.

Officers said they had been reviewing if £60 per tonne is adequate, and the report referred to £90 per tonne of Carbon being charged. The Commission supports a review to ensure that the right price is charged to ensure that sufficient carbon can be saved through wise investment, and that developers are incentivised to save as much carbon as possible 'on-site'.

As well as driving down the use of Carbon Offsets, and setting the right price, clarity on the use of offset funds is also important, to ensure that they are transparently apportioned and well used. Councils such as Islington use Carbon Offsets to invest capital in Community Energy. Officers at the meeting referred to the possibility of using Carbon Offsets to improve the energy efficiency of Southwark homes, which will need around £ 10 million.

Presently, according to a GLA report, Southwark has not spent any of its Carbon Offsets since at least 2016, although it has a total of £1,694, 824 carbon offsets in the pipeline; the majority of which are due to be verified and paid post construction.⁵ The Director of Planning confirmed at the 17 June meetings that £1.5 million had been now collected, though not yet spent, and that similar amounts are expected to flow from future regeneration projects. The allocation of Carbon Offsets will be decided at the July cabinet meeting.

⁵ Twenty-three LPAs reported that no carbon offset payments have been spent since 1 October 2016. Southwark reported that the first release of funds would take place in summer 2019. £229,388 has been calculated and will be collected post-construction, and a further £1,465,436 has not yet been calculated as a post construction testing approach is being taken and will be verified at that point.

Recommendation 9 The Commission is aware of the significance of the New Southwark Plan in relation to the delivery of Southwark’s overall climate goals. The Commission is keen to ensure that Southwark delivers on its ambitions for both zero/low carbon growth and improvements to biodiversity through Supplementary Planning Documents and that these should be developed as a matter of urgency.

Recommendation 10 A focus on increasing ‘on site’ carbon emissions to at least 40% for major non-residential development and 100% for major residential development, through regular monitoring, in order to increase emissions delivered ‘on site’ by 25% each year.

Recommendation 11 Reduce embodied carbon and conserve resources in construction, by utilising the work of the London Waste and Recycling Board work on the Circular Economy and the Net Zero Carbon Buildings: A Framework Definition.

Recommendation 12 Include a policy on investment of Carbon Offsets in the Climate Emergency strategy, that is subject to consultation.

Recommendation 13 Ensure the price of Carbon Offsets can save a tonne of carbon (e.g. at least £90 per tonne and consider £120 per tonne).

12 Community Energy and Local Energy

Community led renewable energy is a manifesto and council plan commitment the council has struggled to take forward, and last year this was subject to a scrutiny review by the previous scrutiny commission with the environment remit.

The first Commission report on the Climate Emergency encouraged the use of community energy at the earliest opportunity to help build community engagement and confidence in our resolve and commitment. In response the cabinet said the council is taking forward the proposal for community led renewable energy; however, the report cited challenges in developing sustainable energy projects on our estates. The report assured the Commission that cabinet are looking at a range of ideas to take the work forward.

Following this cabinet response, a session on Community Energy was held at the 10th March meeting. Repowering London outlined how community led renewable energy is based on facilitating a decentralised model of empowering communities and community benefit companies. As well as the more obvious benefits of carbon reduction there are also the social benefits that come from visible solar projects in the community and the cooperative model that is used, and the ability of local community energy projects to mobilise and enthuse people.

At the meeting the Commission heard that the previous technical evaluation of three community energy pilots on Southwark estates had concentrated on the narrow

question of economic value, rather than considering the more intangible social benefits. The pilots were also conducted during a challenging moment in the funding for solar as the FIT programme was ending, and the future funding model was uncertain.

Repowering London highlighted these actions and opportunities to improve viability:

- The new finance model allows for a mixture of capital investment
- Carbon Offsets have been used to pump prime schemes in other local authorities
- Community buildings, such as schools and community centres, can be good sites for solar schemes as energy use is in the day, improving economic viability, and the social outcomes from working with school children are also high

We hope the presentation by Repowering London and subsequent discussion will enable some fresh thinking about how to take this forward, post FIT, and note the commitment to prepare a report on this for summer 2020.

Local Energy

At the Commission meeting on 10th March the Cabinet lead, Cllr Richard Livingstone, also indicated that the council would be seeking to maximise local energy projects on our estates, which is welcome.

Lambeth have commissioned an organisation to carry out a GIS spatial analysis of every Lambeth property to calculate Solar PV potential and carbon savings with a view to carrying out feasibility studies in due course. Likewise, Tower Hamlets are identifying all roofs in their ownership that could be fitted with bio solar (green roofs and solar combined) and have set aside £500,000 to implement this.

Recommendation 14 Support community schools to adopt community energy, as a first stage in rolling out Community Energy.

Recommendation 15 Invest a proportion of our Carbon Offset funds into Community Energy, subject to consultation in the Climate Emergency strategy.

Recommendation 16 Set out a plan for mapping and identifying viable PV sites in Southwark, starting with community schools