

Sustainable development select committee

Title	Progress on the Implementation of Air Quality Action Plan 2016 – 2021 and review of the Draft Low Emission Vehicle Charging Strategy 2018-2022		
Key Decision	NO		Item No.
Ward	All wards however focus on wards north of A205 where Air Quality Management Areas have been declared.		
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Class	Part 1	Date:19 th July 2018	

1. Summary

- 1.1. Mayor and Cabinet approved the Air Quality Action Plan 2016-2021 in December 2016. The Sustainable Development Scrutiny Committee commended the draft AQAP and made recommendations to the Mayor and Cabinet on 25th October 2016, which were all incorporated within the approved AQAP. These additional actions included tasking Lewisham's political leadership with championing the issue of air quality inside and outside of the borough; that the Council carries out a campaign to encourage Electric Vehicle usage; and a proactive and high profile anti-idling campaign, which sets out the importance of good air quality to the whole community.
- 1.2. In June 2017 the Sustainable Development Scrutiny Committee met to consider progress. The following points were made in the presentation to the committee:
 - The air quality action plan was agreed by Mayor and Cabinet in December.
 - Additions suggested by the Sustainable Development Select Committee on political leadership, electric vehicle charging points and an anti-idling campaign had been incorporated into the action plan.
 - The Mayor had appointed Councillor McGeevor as champion for air quality.
 - A number of new initiatives to improve air quality were being considered.
 - There had been a delay in installing additional electric vehicle charging points. However, work was progressing to develop new options for charging points.
 - Transport for London (TfL) were looking for locations for rapid charging points in the borough.
 - More work would be carried out in the Autumn/Winter of 2017 to promote the use of electric vehicles.
 - Lewisham had joined with a consortium of 12 other London boroughs to develop an anti-idling initiative (more information was available online at <http://idlingaction.london/>).
 - The campaign would recruit volunteers to develop community initiatives to reduce idling. This work would focus mostly on schools.
 - The Council did not have sustainable school, workplace or commuter strategies, but the

sustainable transport team worked directly with schools on sustainable travel and air quality.

2. Purpose

- 2.1. The purpose of this report is to provide information on the progress made with the AQAP 2016-2021, particularly in relation to recommendations from the committee. The committee has requested specific information in relation to the electric vehicle charging point provision, which is addressed as part of this report.

3. Recommendations

- 3.1. That the Committee is asked to review the Action Plan progress over 2017 submitted to the GLA in May 2018 as part of the Council's statutory required Annual Status Report (Appendix A) along with the additional information required by the Committee and presented in the Narrative.
- 3.2. That the Committee is asked to consider the questions being asked as part of the consultation (see Appendix E) and provide their views on each of these.
<https://consultation.lewisham.gov.uk/>

4. Policy context

- 4.1. The AQAP and the Draft Low Emission Vehicle Strategy supports the Clean, Green and Liveable Council priority and the Sustainable Community Strategy 2008-2020.

5. Narrative for Air Quality Progress

- 5.1. A senior management and Councillor team was set up and tasked by the previous Mayor to raise the profile of air quality, promoting action being taken by the Council and campaigning to bring change within the borough, this was presented to the M&C in July 2017.
- 5.2. The Campaign aims to galvanise borough-wide action to address air quality issues in Lewisham. It seeks to both reduce emissions to improve air quality, and reduce exposure to poor air quality. To achieve this, the campaign will:
 - Show the Council as a best-practice example to inspire other organisations to take action e.g. cleaner council fleets, electric charging points, cycle racks, lobby TfL etc.
 - Have clear and consistent messaging that targeted at key audiences in the borough, is coordinated across the year and uses a range of appropriate channels
 - Take an evidence-based approach, drawing on available research to maximise effectiveness of actions and to build new knowledge through research partnerships with academic units investigating air quality issues
 - Encourage residents to sign a pledge of actions to improve air quality
 - Identify and support air quality champions to lead change in communities,

contributing to an ethos of community development

- Work with partners to support behaviour change e.g. NHS staff to encourage those with long term conditions to sign up to air pollution alerts.
- Work with partners as critical friends e.g. Ella Roberta Foundation

- 5.3. The Committee also requested an update on a Low Emission Transport Strategy.
- 5.4. The date for the campaign was originally for May 2017, which has been delayed as the installations of new Electric Vehicle Charging Points has required Traffic Orders and legal considerations around lease agreements on the Highway, with the supplier Blue Point.
- 5.5. In the interim the Council's, Transport Planning Team commissioned a consultant to work on a 'Low Emission Vehicle Charging Strategy' for the Council. The findings of their work are presented in the narrative, section 6.
- 5.6. The Committee also recommended that there be a proactive and high profile anti-idling campaign, which sets out the importance of good air quality to the whole community.
- 5.7. Lewisham joined other London boroughs in a vehicle idling action behaviour change campaign and held 3 events Lewisham last year at Primary Schools (see Appendix C for a summary report). The scheme trained volunteers on the event day on approaching vehicles that are idling to educate and inform.
- 5.8. The Committee previously requested information on sustainable school and workplace travel plans/commuter strategies. The Council has been encouraging schools to join TfL STARS accredited travel planning programme for many years. In addition to this and as part of the Lewisham Mayor's Air Quality Conference held in March 2018 (see 5.13 for further details), a morning session was run for schools with 18 schools attending and details of a Lewisham School Air Quality Award Scheme was announced with a start date in the new academic year 2018/19. As previously noted at the last Committee meeting, with all new major development planning applications a condition is included for workplace and residential travel plans. There is no overall strategy for this. The Council is guided by good practice advice produced by TfL which it promotes through Planning and Sustainable Transport. The new Lewisham Air app, which is being widely promoted, provides specific directions for low pollution routes and encourages alternative to car use.
- 5.9. In addition to the Annual Status Report (ASR) Action progress presented in Appendix A, the progress report to the GLA for the London Mayor Air Quality Funding (MAQF) bid for £200,000 for the production, implementation and monitoring of a Framework Construction Logistic Plan along the Evelyn Corridor over three years is presented in Appendix B. On the basis of this report the GLA agreed funding for 2018/19.

5.10. To be successful in any future bids for MAQF money we must maintain our Cleaner Air Borough Status (CABS). The GLA are changing the qualifying criteria for boroughs becoming a Cleaner Air Borough and details are still to be received. The criteria for CABS previously were grouped under six themes: political leadership; taking action; leading by example; using the Planning system; informing the public; integrating air quality into the public health system.

5.11. **New DEFRA funded project – Cleaner Air Villages**

A recent bid for DEFRA funding was awarded to Lewisham as part of a consortium of five boroughs, in progressing engagement with the business community within two Air Quality Focus Areas in the borough. This project has just started and seminars are planned to be held in Deptford High Street area and Lewisham Town Centre area within the next month, and local Councillors will be invited to these seminars. The project is called Cleaner Air Villages and is managed by Cross River Partnership (CRP) and the objectives of the proposed programme are:

- work closely with businesses and boroughs (via seminars and 1-2-1 support) to identify needs and demand for co-ordinated local solutions to make local deliveries more efficient;
- develop and implement local solutions (e.g. preferred supplier lists, micro delivery consolidation);
- update CRP's deliverBEST diagnostic tool (www.deliverBEST.london) with relevant local solutions for businesses in each of the ten focus areas;
- develop communications to motivate businesses to complete the deliverBEST questionnaire;
- support businesses to implement and embed actions, including new collective solutions;
- measure and report reduction in emissions from deliveries & servicing achieved;
- develop case studies to showcase best practice and business benefits of taking action.

5.12. Finally in the submitted Annual Status Report of 2017, we stated the following as an introductory summary:

'2017 was a very important year for Lewisham in raising the profile on air quality. The Lewisham Mayor laid out his commitment by launching an Air Quality Campaign, approved by Mayor and Cabinet in June 2017, this focused on behavioural change by all whilst providing a focused approach with children, schools, transport and infrastructure projects coupled with an evidenced based approach. The Mayor appointed his own Air Quality Champion. With links to academic research and development, Lewisham hosted the MRC Festival 2017, Our Air, Your Health, with a history of air pollution in Deptford (1661 – 2017) as one of the academic talks on air quality. An Air Quality Master Class was provided to Lewisham Councillors, by Kings College London. Preparations were made for a Lewisham Air Quality Conference,

open to the public and also a School Air Quality Event, both to be held in March 2018, with the plans for the promotion of the new Lewisham Air app and also the pilot scheme for an Air Quality School Accreditation Scheme.'

5.13. The Air Quality Conference was held on March 16th. There were 18 schools that attended the morning Air Quality event around schools, where we had workshops for children and where the proposal for a Lewisham School Air Quality Award was detailed. There was also the opportunity in the afternoon, where we had our wider Air Quality Conference to launch the Lewisham Air app. Details on the Lewisham Air app, in a business card format, along with the Lewisham Clean Air Pledges, which is also being actively promoted is found in Appendix D.

5.14. Preparation and plans for the expansion of Lewisham's Air Quality monitoring also took place in 2017 with the introduction of an additional 17 diffusion tube locations i.e. from 33 to 50 and a contribution made by the Council towards the installation of an Air Quality Supersite, at Honour Oak Park Sports Ground managed by the Environmental Research Group at Kings College, London.

5.15. **New Air Quality Supersite in Lewisham:**

The new site at Honour Oak Park Sports Ground is planned for installation in September 2018. It is a new million pound air pollution research lab, with primary funding from Natural Environment Research Council (NERC). Kings have been running the only two research 'supersites' in the UK in Kensington and Westminster. The new site in Lewisham will help measure the physical and chemical composition of particles, the toxic gases in the atmosphere's greenhouse such as carbon dioxide and methane." One of the Mayor's Air Quality Campaign objectives was: 'Take an evidence-based approach, drawing on available research to maximise effectiveness of actions and to build new knowledge through research partnerships with academic units investigating air quality issues.' We are at the forefront of this within London with the introduction of this new Air Quality Monitoring site.

5.16 **TfL School Air Quality Audits**

The London Mayor carried out an Air Quality Audit at three schools within the borough, which were St James Hatcham Primary, Haseltine Primary and Deptford Park Primary and was part of the first of 50 primary schools audited where levels were exceeding limit levels. Details of the audit recommendations can be found in www.london.gov.uk/what-we-do/environment/pollution-and-air-quality/mayors-school-air-quality-audit-programme . As part of the London Mayor's commitment to bringing improvements to the schools he has allocated £10,000 to fund one of the recommendations from the audit for each of the schools. The School and the Council are to meet with TfL to agree a proposal for how money is to be used, which is subject to their approval. There is an expectation that the Council will assist in

finding additional funding to potentially match fund this commitment from TfL.

London boroughs are encouraged to use the developed Schools Air Quality Audit toolkit to further audit affected schools within high pollution areas, where necessary, to make recommendations in developing measures and actions to reduce exposure to children affected. The criteria for how and where these audits may be carried out is still being developed.

5.17 Expansion of the Ultra-Low Emission Zone:

The London Mayor on the 8th June confirmed expansion of ULEZ for light vehicles up to North and South circular roads from 25 October 2021. Although the Council would have preferred to see a Londonwide expansion of the ULEZ, we welcome the proposals to introduce a south circular boundary scheme by 2021 as it will have early benefits for those living inside the zone, although we are still pressing for further expansion London wide at the earliest opportunity. There are benefits for those living outside the zone as well (see Appendix E for 'Expansion of the ULEZ: Summary figures and charts'), but there are issues of concern that we are going to raise with the London Mayor. These are:

- More detail on traffic modelling and air quality prediction mapping to show difference in the traffic levels, impact on parking and air quality levels, showing what the future prediction with or without the scheme will mean for those living on and south of the South circular.
- Confirmation that all infrastructure required for the scheme will be fully funded by TfL. The Council are reliant on funding stream, such as LiP for delivering a variety of projects, including an electric vehicle charging point network and other schemes designed to improve air quality in the borough. We are also reliant on these funds to support projects, such as the Go Ultra Low City Scheme (GULCS) and others, that aim to install electric/hydrogen vehicle charging infrastructure throughout the borough. We cannot have these funding streams diverted to fund this scheme. There are also significant resource implications for the Council in providing localised interventions to bring compliance, outside of the expanded ULEZ.
- We intend to also state that TfL will also need to invest in supporting transport infrastructure to ensure that people whose vehicles do not meet the criteria have alternative options for sustainable travel. This is in the context of existing pressure on public transport networks at peak times and the more limited public transport accessibility in the south of the borough. The inadequate provision of public transport in the south of the borough and under-capacity in the north, which will be put under greater strain with the introduction of the expanded ULEZ, again highlights the need for the Bakerloo extension to go to Catford and beyond. It also requires not only improved public transport, but also investment in cycling infrastructure, public realm improvements and

supporting initiatives (eg cycle training, bike hire etc) to encourage more walking and cycling. Increasing the funding available to boroughs to deliver electric vehicle charging infrastructure would also be welcomed to help accelerate delivery of the charging points.

There is also a London-wide zone for heavy duty vehicles (buses, coaches, Heavy Goods Vehicles (HGVs) and other specialist heavy vehicles) to need to meet Euro VI emissions from 26 October 2020.

Narrative for Low Emission Vehicle Charging Strategy

5.16. Lewisham Council has been developing a dedicated 'Low Emissions Vehicle Charging strategy 2018-2022' for the Borough in direct response to the growing appetite for electric and hybrid vehicles in both the private and commercial communities. It is also in response to the strategy objectives set out in the Mayors Transport Strategy and the emerging London Plan.

5.17. The draft strategy sets out a clear vision:

"To ensure that all of Lewisham's residents, businesses and visitors are within 500m of an electric charging point by 2020, with a range of options available that remain fit for purpose and encourage further uptake of low emission vehicles"

6.3 The four strategy objectives are set out below, and there are a number of key actions for each of these:

1) To support the following types of charging through provision of appropriate infrastructure in the right locations:

- a) charging points in residential areas
- b) charging points in town centres, workplaces and other key destinations
- c) charging points for car club vehicles
- d) charging points for freight and servicing vehicles
- e) charging points for taxis

2) To ensure that provision and maintenance of EVCPs becomes cost neutral to the Council through the pursuit of infrastructure funding opportunities and income from the charging points

3) To ensure the charging network remains fit for purpose, can cater for future expansion and is adaptable to emerging technologies

4) To encourage the uptake of electric vehicles through supporting policy frameworks, initiatives and public engagement, drawing on best practice from around the UK and beyond.

5.18. The draft strategy is currently out to public consultation (see <https://consultation.lewisham.gov.uk/>), which will run until 13th August. The

draft strategy can be found in Appendix F. It is anticipated that a final strategy will be formally adopted by winter 2018/19. Alongside the development of the strategy, delivery of further charge points will continue through the remaining financial year of 18/19 and beyond, funding dependent.

6.5 **Charging infrastructure**

In order to achieve the proposed vision, objectives and target set out above, the Council intends to deliver three main types of charging infrastructure, as set out below. Map A in Appendix 4 shows existing charging points across the borough. Map B shows that in order to deliver the 500m coverage set out in the strategy vision, at least an additional 41 points will be required (over and above those already planned in the next 2018 delivery phase).

6.6 **A) Lamp column charging**

This type of charging unit is a 3kw unit also known as a 'trickle charge'. It has a charge time of around 8 hours and is aimed at residential streets. The units can be incorporated into existing infrastructure such as lamp columns which already exist all over the borough. It makes this type of charge unit attractive as it's both cheaper than the higher power output options and it does not on the whole add more 'clutter' to the streetscape. There are some disadvantages and limitations to the unit however. The relatively slow charge time compared with other options mean they are really only suited to overnight charging and therefore have limited application outside a residential/long stay car parking setting. A more Lewisham specific limitation is the particular method of management of our lighting infrastructure. Lewisham's lamp columns are owned and managed by a PFI contract with Skanska. Over the past 2 years Skanska have been upgrading the majority of Lewisham's columns. As part of this work they moved a significant majority of the columns to the back of the footway, which was seen as an improvement in terms of reducing the number of columns damaged by vehicles and also better lighting of the footway. Officers are in initial discussions with Skanska on how to deliver this type of charging. Initial meetings have been positive and officers are confident some level of lamp column charging can be provided.

6.7 **B) Standard/fast 7-22 Kw chargers**

6.7.1 **Source London (Bluepoint)**

- Lewisham already has a number of electric vehicle charge points located across the borough. Other than those provided by private sites, such as supermarkets, those on Lewisham highway and carparks have been provided by a private enterprise called Bluepoint London (BPL) under the 'Source London' framework. BPL offer a capital cost free solution to providing electric charging infrastructure. BPL cover all the costs of installation and ongoing management/maintenance and the borough receives a fixed fee per bay, plus

a small share of the company's profits. Users are charged a membership or pay as you go option for charging.

- The charge point they use is a 7kw charge point also known as a 'fast charge' point, although they are often labelled 'standard' chargers as they have been most commonly implemented by boroughs to date. These are standalone units that are slightly thicker than a lamp column and stand around 1.50m high. The charge time for these units is around 4 hours so are more suited to destination on-street parking (such as town centres) and car parks. However, some provision in residential areas, for those who need a faster charge, is also recommended.
- Lewisham currently has 10 BPL charge points on-street and in car parks (see map in Appendix). BPL is currently looking to roll out a further 9 points this year and these sites have recently been consulted on informally. These standalone units require both planning permission and Traffic Management Orders (TMOs), giving residents and businesses a formal avenue to comment on any proposed sites. The next step is for BPL to submit planning applications for these sites.

6.7.2 Other providers

- The 7kw charge points are seen as an important element of Lewisham's strategy to providing fit for purpose charging. As a result officers are looking to procure similar units to those offered by BPL from other contractors to ensure competition in the market for the benefit of the consumer. Officers have been able to access funding from the Office for Low Emission Vehicles (OLEV) to enable procurement of further 7kw units and also the lamp column charging units referred to above. There is a requirement for boroughs to 25% match fund the 75% share from OLEV, which it is intended to do from the borough's LIP allocation. Although the borough has to fund the equipment, the borough takes a greater share of the revenue from the point. (See diagram in Appendix 2 for a summary of the different options)

6.8 C) Rapids

- 6.8.1 The last infrastructure option is the rapid charge units. These standalone units are the largest of all the solutions standing 1.6+ metres tall and slightly larger in diameter than a pillar box. These units are able to charge in 30 minutes delivering 50kw of charge. Due to the high charge output of these units they require extra infrastructure such as feeder pillars and in some cases sub stations. These units however will be essential for the future commercial fleet of electric vehicles such as taxis and delivery vans who will require quick charging. TfL currently have a programme of delivering these

rapid units on the TLRN (Transport for London Road Network) and officers are working with TfL on finding appropriate locations in the borough. The units require planning permission, plus a Traffic Management Order for any on-street, so again comments by the public are captured on a site by site basis.

6.9 Website/requests

6.9.1 Once the EV strategy has been completed and out for consultation officers are looking to update the council website with an improved online request form where residents and businesses can find out about Lewisham's approach to EV's and suggest locations for charge points. The request list will be used to help inform the delivery programme. It is envisaged that requests will start slowly, but build momentum as EV's become more mainstream. Driving this momentum will be, amongst other things, the second hand market of EV's becoming more robust and London wide policies such as the expanded ULEZ (Ultra Low Emission Zone) coming into force.

6.9.2 It is recognized that the Council needs to stay ahead of the curve in terms of supply vs demand of EV charging. This will enable the borough to cater for the increasing appetite for EV's, while also being mindful of other policy objectives of bringing overall motorised traffic journeys down across the borough, electric or otherwise.

6. Financial implications

6.1. For the work within Air Quality this is being funded from the original budget, with additional funding from the Mayor Air Quality Fund and DEFRA bid funding.

6.2. One of the key objectives of the Council's LEV Charging Point Strategy is to ensure that provision and maintenance of EVCPs becomes cost neutral to the Council through the pursuit of infrastructure funding opportunities and income from the charging points. The Source London charging points are being funded by the provider, and the Council will receive a fee in return for each parking bay. The Council will also look to work with other providers through a similar model to the above or by using funding secured from TfL and central government to install the equipment, with ongoing maintenance/operation covered by the scheme fees. Some officer time will be required to project manage the installation of the points, although some of this will be recovered through the above grants.

7. Legal implications

7.1. Section 82 of the Environment Act 1995 provides that every local authority is under a duty to review the air quality within its area. Section 83 of the 1995 Act requires local authorities to formally designate an air quality management area (AQMA) where air quality objectives are not being achieved, or are not likely to be achieved within the relevant period, as set out in the Air Quality (England) Regulations 2000.

- 7.2. Following designation of an AQMA, an air quality “Action Plan” should be completed. With the newly adopted London Local Air Quality Management process, London Boroughs are to provide Annual Status Reports to the GLA on progress with Air Quality Actions and reporting on air quality monitoring. Previously Progress Reports were submitted to DEFRA.
- 7.3. In the Mayor of London’s Policy Guidance 2016 (LLAQM.PG (16)) it states the following: ‘The establishment of the LLAQM system reflects the fact that the Mayor has broad powers of intervention under section 85 of the 1995 Act... Specifically, under section 85(5), the Mayor may give directions to boroughs requiring them to take such steps specified in the directions as he considers appropriate for the implementation of any European Union air quality obligations (e.g. under relevant EU directives). This is particularly relevant in the context of the current breach of NO₂ air quality objectives and limit values under the EU Ambient Air Quality Directive (2008/ 50/ EC) in parts of London.’ Also the Localism Act 2011, enables the Government, if a fine is imposed on the UK by the European Court of Justice, to require public bodies it considers responsible for the infraction to pay a financial penalty. The Mayor of London’s Policy Guidance states: ‘Proper participation in the LLAQM system and compliance with the relevant Mayoral advice and guidance should render statutory intervention by the Mayor unnecessary.’

8. Crime and disorder implications

- 8.1. There are no crime and disorder implications associated with this report.

9. Equalities implications

- 9.1. The majority of the AQMAs declared are to the north of A205, encompassing all of the north of the borough.
- 9.2. Poor air quality is often associated with areas of deprivation and consequently tends to disproportionately affect the health of the most disadvantaged. There is no data on the specific households affected by the exceedences of NO₂ within the AQMAs but the Index of Multiple Deprivation suggests that there are many areas to the north of the borough that are deprived which fall within an AQMA.
- 9.3. The AQAP will apply across the areas designated as AQMAs. Measures aimed at tackling poor air quality however tend to have wider benefits and actions introduced will also improve air quality throughout the borough. Therefore, there is no adverse equalities implications associated with this report.

10. Environmental implications

- 10.1. The approval of the Air Quality Action Plan will allow the local authority to fulfil its statutory obligations under the Environment Act 1995 which are aimed at improving air quality.

- 10.2. An Air Quality Action Plan will have positive benefits for the environment. A synergy exists between actions aimed at improving the quality of the air we breathe locally and tackling carbon emissions and improving public health and well-being.
- 10.3. The Low Emissions Vehicle Charging strategy 2018-2022 will provide an infrastructure to assist in the transition away from petrol and diesel powered vehicles, hence reducing the air quality impacts.

11. Conclusion

- 11.1. The Air Quality Action progress has been presented in this report and any comments/recommendations of the committee will be considered in formulating any future actions.
- 11.2. The draft LEV Charging Point Strategy is presented as part of this report, and any comments/recommendations from the Committee will be considered in formulating the final strategy, along with other comments received as part of the consultation.

Background documents and originator

Appendix A – Table of Air Quality Action Progress reported as part of the Annual Status Report to the GLA for progress in 2017.

Appendix B – Progress Report for the MAQF, 2016/19

Appendix C – Summary Report of Idling Action events

Appendix D – Lewisham Air app and Lewisham Clean Air Pledge business card

Appendix E – Expansion of the ULEZ: Summary figures and charts

Appendix F – Low Emissions Vehicle Charging strategy 2018-2022

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Appendix A

Table of Air Quality Action Progress reported as part of the Annual Status Report to the GLA for progress in 2017.

ID	Action Category	Action	Progress and planned action presented in 2016 ASR	Progress 2017 and Planned Future Action
1	Emissions from developments and buildings	Ensuring emissions from construction are minimised	<p>Number of applications for the discharge of the Construction Logistics Plan and the Construction Environmental Management Plan approved:</p> <p><i>10 x applications for Approval of construction Logistics plan & 47 x applications for approval of construction management/Environmental plans</i></p>	<p>42 Construction Logistics Plan applications and 47 Construction (Environmental) Management Plan discharged. A new Local Plan is being developed in 2018. Environmental Protection Policies are being considered as part of this process and these will be informed by policies developed in the new London Plan. As part of the process wording for the condition/s controlling emissions from construction will be considered, along with the review and development of current guidance.</p>
2	Emissions from developments and buildings	Ensuring enforcement of Non Road Mobile Machinery (NRMM) air quality policies	<p>Number of NRMM conditions recorded, and all sites checked on the NRMM database once construction begins:</p> <p>See Table K for more details</p>	<p>See Table K for details.</p> <p>The development of policy in the new London Plan will strengthen enforcement of NRMM.</p>
3	Emissions from developments and buildings	Enforcing alternative clean and efficient energy supplies (to replace Enforcing CHP and biomass air quality policies)	<p>Planning to review abatement conditions in 2017 and report in 2017 ASR.</p>	<p>An energy assessment is required for every major application. An energy assessment must include:</p> <ul style="list-style-type: none"> - a response to the 3 stages of the Mayor's Energy hierarchy demonstrating compliance with each stage - a calculation of the baseline energy demand and carbon dioxide emissions (with evidence of how it has been calculated) - details of the performance of the building - a feasibility study of all renewable technologies - the proposed technical solution - an explanation of where and why the proposed development does not meet identified standards. - a fully completed 'Monitoring for Sustainability' form (can be downloaded from the Council's website: http://www.lewisham.gov.uk/myservices/planning/policy/Documents/SustainabilityMonitoringForm.pdf).

ID	Action Category	Action	Progress and planned action presented in 2016 ASR	Progress 2017 and Planned Future Action
4	Emissions from developments and buildings	Enforcing Air Quality Neutral policies	Air Quality Neutral Assessments reviewed: See Table K for more details	See Table K for details. The development of policy in the new London Plan will strengthen the Air Quality Neutral requirements.
5	Emissions from developments and buildings	Ensuring adequate, appropriate, and well located green space and infrastructure is included in new developments	To review a list of appropriate tree/planting species which aid Air Quality in 2017. Greenspace provision: See Table K for details	Public realm improvements provided in community green space at: GARAGES AND GREEN SPACE (AT REAR OF 182-244 WOOD VALE), BUCKLEY CLOSE, LONDON, SE23 3EQ. In addition to this, Quietway routes provided improved aesthetics and greening and was introduced in 2016 and had initial increase in use of 38% over 2017. The Council is encouraging community tree planting: https://www.lewisham.gov.uk/myservices/environment/trees/Pages/Tree-planting-scheme.aspx . A list of Tree species for air quality improvement has not been produced as there is only general advice on species available i.e. Due to the larger total surface area of needles, coniferous trees have a larger filtering capacity than trees with deciduous leaves (Stolt, 1982). This capacity is also greater because the needles are not shed during the winter, when the air quality is usually worse. However, coniferous trees are sensitive to air pollution and deciduous trees are better at absorbing gases (Stolt, 1982). A mix of species therefore seems to be the best alternative. Air pollution filtering capacity increases with more leaf area, and is thus higher for trees than bushes or grassland (Givoni, 1991).
6	Emissions from developments and buildings	Ensuring that Smoke Control Zones are appropriately identified and fully promoted and enforced	Council Wide Publicity Campaign to be organised for late Spring/early Summer 2017 where information on Smoke Control Areas and requirements will be promoted.	Lewisham focused on the Lewisham Mayor's Air Quality campaign (See 2.1 introduction to table) Publicity around Smoke Control Zones is now planned for Winter 2018, where we'll work with the London Mayor in providing information and requirements to reduce the air quality impact.

ID	Action Category	Action	Progress and planned action presented in 2016 ASR	Progress 2017 and Planned Future Action
7	Emissions from developments and buildings	Promoting and delivering energy efficiency retrofitting projects in workplaces and homes, including through using the GLA RE:NEW and RE:FIT programmes, where appropriate, to replace old boilers /top-up loft insulation in combination with other energy conservation measures.	Individual projects will establish their own monitoring in line with the requirements of funders and the availability of data. Ongoing delivery of the Warm Homes, Healthy People scheme which is currently scheduled to run until August 2017. Publicising the Mayor of London's 'Better Boilers' scheme to residents. Seeking to access the new round of ECO funding when it is released in April 2017.	Lewisham's Warm Homes Healthy People fuel poverty advice service was delivered in 250 homes in 2017/18. Actions taken by residents reduced emission by 83tCO2e. In 2018/19 the project will extend to cover Bexley, Bromley, Greenwich, Lewisham and Southwark with support from the GLA. Lewisham, in partnership with South East Community Energy and Retrofit Works, are enabling residents to access energy company funding for heating and insulation improvements, in 2017/18 152 measures were installed.
7A	Emissions from developments and buildings	Introduce a requirement for a minimum EPC rating for privately rented sector HMOs covered by both the mandatory and additional licensing schemes	Ongoing.	Works recommended in EPC inspection report to ensure property has a rating of 'E' or above is included in licensing conditions of HMO's. Enforcement action carried out if EPC forms not submitted. <i>Also where Council procure properties for use by the Council for temporary accommodation this also meets a minimum EPC rating of 'E'.</i>
7B	Emissions from developments and buildings	Introduce a requirement for any works covered by the Disabled Facilities Grant or discretionary housing improvement grants to meet level D EPC rating in privately owned accommodation	Still considering monitoring of action, which will be updated on the 2017 ASR submission.	The action has not been implemented due to staffing changes and reorganisation but has been raised with the new team management and will be considered in any future reviews of the Council's housing assistance policy and an update will be provided in the next ASR. However, from 1st April with Empty homes grants (Discretionary grant) officers will make sure that properties brought back into use under these grants meet the Government's requirement of at least a minimum EPC rating of 'E' on completion. The mandatory Disabled Facilities Grant helps homeowners and tenants to fund home adaptations and this is not something the Council can currently include.

ID	Action Category	Action	Progress and planned action presented in 2016 ASR	Progress 2017 and Planned Future Action
8	Public health and awareness raising	Ensure that Directors of Public Health (DsPHs) have been fully briefed on the scale of the problem in the local authority area, what is being done, and what is needed.	This ASR in draft form was reviewed at Lewisham's Health Protection Committee in March 2017 where actions were considered and approved.	The ASR was discussed at the HPC meeting held on 12 February and was presented to the DMT for Community Services on 17 th May and signed off. The Director of Public Health is part of this management team.
8A	Public health and awareness raising	The Council's political leadership will champion the issue of air quality inside and outside of the borough	Dedicated Communication officer currently reviewing all publicity and campaigns in relation to Air Quality for 2017.	The Lewisham Mayor's Air Quality campaign (See 2.1 introduction to table), included the appointment of the Mayor's Air Quality Champion.
9	Public health and awareness raising	Public Health Teams should be supporting engagement with local stakeholders (businesses, schools, community groups and healthcare providers). They should be asked for their support via the DsPH when projects are being developed.	In 2017 we will be reviewing development of Healthy Weight Strategy and synergy with sustainable transport and potential for air quality improvements with reduction in car use being considered.	The Healthy Weight Strategy developer in 2017 has as one of its main aims to 'promote an environment that supports healthy weight and wellbeing as the norm, making it easier for our residents to choose healthier diets and active lifestyles.' There are synergies to air quality improvement with a more active lifestyle and these links are being developed.
10	Public health and awareness raising	Director of Public Health to have responsibility for ensuring their Joint Strategic Needs Assessment (JSNA) has up to date information on air quality impacts on the population	Public Health element of the JSNA is currently being refreshed. Public Health intelligence team is awaiting updated data from GLA. JSNA refresh is planned to be completed in May 2017.	JSNA for Air Quality was refreshed in 2017.
11	Public health and awareness raising	Strengthening co-ordination with Public Health by ensuring that at least one Consultant-grade public health specialist within the borough has air quality responsibilities outlined in their job profile	The Health and Wellbeing Strategy for 2018-2020 being reviewed in 2017. Air Quality is being considered and drafted for consideration and inclusion in strategy.	Provided Lewisham Health Protection Committee air quality updates. The Health and Wellbeing Strategy is still being drafted.

ID	Action Category	Action	Progress and planned action presented in 2016 ASR	Progress 2017 and Planned Future Action
12	Public health and awareness raising	Director of Public Health to sign off Statutory Annual Status Reports and all new Air Quality Action Plans	The 2016 ASR in draft form was reviewed at Lewisham's Health Protection Committee in March 2017 where actions were considered and approved.	The ASR was presented to the DMT for Community Services. The Director of Public Health is part of this management team.
13	Public health and awareness raising	Ensure Head of Transport fully briefed along with all Directors responsible for delivering air quality actions. Briefing to disseminate amongst transport team.	Briefing through Steering Group that meets every 6 months. This ASR in draft form was reviewed by the DMT where actions were considered and approved. Also regular working groups set up with Transport teams to consider potential for further Air Quality initiatives.	Provided brief through Bi monthly Air Quality Working Groups and also Strategic Air Quality Board meetings every quarter. Also separate focused meetings with transport in relation to Electric Vehicle provision and school projects.

ID	Action Category	Action	Progress and planned action presented in 2016 ASR	Progress 2017 and Planned Future Action
14	Public health and awareness raising	Engagement with businesses	<p>Number of applications for the discharge of the DSP condition approved: 10 applications.</p> <p>Condition wording:</p> <p>(a) The development shall not be occupied until a Delivery and Servicing Plan has been submitted to and approved in writing by the local planning authority.</p> <p>(b) The plan shall demonstrate the expected number and time of delivery and servicing trips to the site, with the aim of reducing the impact of servicing activity.</p> <p>(c) The approved Delivery and Servicing Plan shall be implemented in full accordance with the approved details from the first occupation of the development and shall be adhered to in perpetuity.</p> <p>Reason: In order to ensure satisfactory vehicle management and to comply with Policy 14 Sustainable movement and transport of the Core Strategy (June 2011).</p>	<p>Number of applications for the discharge of the DSP condition approved: 11 applications.</p> <p>Promoted deliverBEST at the 2017 Mayor's Business Award. As a result of this one Lewisham-based business (Fronte) linked in with the scheme as they promote their new sustainable delivery option (see: https://www.fronte.co.uk/sustainable-parcel-delivery-with-click-and-collect/), along with contacts with many local businesses.</p> <p>DEFRA bid application for Cleaner Villages was successful, which will provide engagement with businesses with two of the Air Quality Focus Areas, i.e. Lewisham Town Centre and Deptford Church Street. See ID 46 and 47 for new action to report for next ASR.</p>

15	Public health and awareness raising	Promotion of availability of airTEXT	<ul style="list-style-type: none"> • Raise awareness of air quality at strategic groups such as the Lewisham CYP Asthma Network • Influence local health economy stakeholders (including Lewisham CCG & UHL) to encourage clinicians to sign up to resources such as airTEXT, which they can share with relevant patient groups • Ensure frontline healthcare workers are aware of, and respond to air quality alerts, by promoting key public health messages to their vulnerable patients/service users • Total of 150 subscribers to airTEXT within Lewisham in 2016. Last half of 2016, 21 new subscribers included. • Over 500 people had a lung test during the Healthy Lung campaign at the OnBlackheath festival in 2016, part funded by the Council. The airTEXT service 	<p>Total subscribers to airTEXT in Lewisham in 2017 is 173. In 2017 continued to target the same groups as last year. In 2017 the Lewisham Air app was developed.</p> <p>'The promotion of availability of airTEXT' action next year also to include 'The promotion of availability of Lewisham Air app' action. Launched in March 2018, the numbers downloaded have risen to 300 (end of April).</p>
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ID	Action Category	Action	Progress and planned action presented in 2016 ASR	Progress 2017 and Planned Future Action
			<p>was actively promoted during the two day festival.</p> <ul style="list-style-type: none"> 101 e-mail contacts to respondents of AQAP consultation, requesting details on airTEXT 	
16	Public health and awareness raising	Encourage schools to join the TfL STARS accredited travel planning programme by providing information on the benefits to schools and supporting the implementation of such a programme	80% of schools in the borough had an accreditation in 15/16. Work ongoing.	Schools continue to take part in the STARS programme. More targeted work is planned for 2018/19 to look at detailed travel planning and support to reduce the numbers of parents driving to school. Before and after evaluation will be monitored and known behaviour change models will be used to maximize change.
17	Public health and awareness raising	Air quality at schools	Offer an air quality / sustainability play for year 6 pupils at 28 schools. Riot Act arranged for 14 schools for 2017. http://theriotact.co.uk/ This is a school engagement project using theatre to promote sustainable travel to school and raise awareness of the effects of poor air quality.	Through the Mayor's Air Quality campaign we have worked with schools to develop the School Travel Plan. This has included the running of idling action events at three schools and the procurement of 50 anti-idling signs that will be introduced at designated schools in 2018. In 2017, work was carried out in the development of a School Air Quality Accreditation scheme for Lewisham, which is being piloted and planned launch in 2018/19 academic year. A new School Travel Plan officer is to be appointed to work with schools from 2018 and an Air Quality apprentice is working with them to visit and support schools.

ID	Action Category	Action	Progress and planned action presented in 2016 ASR	Progress 2017 and Planned Future Action
17A	Public health and awareness raising	Air quality at schools	Offer Cycle training to schools and appoint Lollipop personnel to provide proficiency and safety for cycling and walking to school.	All primary schools are offered Bikeability for their Year 5/6 pupils. Balance Bike training was carried out at 20 schools. Scooter training courses are booked for the Summer term in 2018.
18	Delivery servicing and freight	Update local authority procurement policies to include a requirement for suppliers with large fleets to have attained silver Fleet Operator Recognition Scheme (FORS) accreditation	Procurement reviewing in April 2017	A programme of internal staff training was provided in 2017 with a specific focus on air quality and procurement delivery.
19	Delivery servicing and freight	Update procurement policies to ensure sustainable logistical measures are implemented (and include requirements for preferentially scoring bidders based on their sustainability criteria)	Procurement reviewing in April 2017 to ensure sustainable and localized air quality issues are considered. The Asset Management Strategy will have benefits as to the energy uses, particularly in relation to low NOx boilers etc.	A programme of internal staff training was provided in 2017 with a specific focus on air quality and procurement delivery.
20	Delivery servicing and freight	Re-organisation of freight to support consolidation (or micro-consolidation) of deliveries, by setting up, or participating in, new logistics facilities, and/or requiring that council suppliers participate in these	MAQF2 project at Evelyn Street Corridor, evaluated possibility of freight consolidation to support construction sites in the area but not seen as viable. Although Lewisham is not part of the Low Emission Logistics project we are being kept up to date on the review of a delivery consolidation area in the South/South East of London.	Considered as a potential action as part of the LIP3 process, which will develop a transport strategy and implementation plan for the borough. Draft document for consultation in Autumn 2018, with final version approved by February 2019.
21	Delivery servicing and freight	Virtual Loading Bays and priority loading for ultra-low emission delivery vehicles	This has been reviewed but is not currently seen as being appropriate given the logistics of delivery and servicing areas within the borough.	This has been reviewed but is not currently seen as being appropriate given the logistics of delivery and servicing areas within the borough.

ID	Action Category	Action	Progress and planned action presented in 2016 ASR	Progress 2017 and Planned Future Action
22	Borough fleet actions	Join the Fleet Operator Recognition Scheme (FORS) for the borough's own fleet and obtain Gold accreditation	Ongoing.	<p>No longer considered necessary to join the FORS scheme due to the admin burden that it will place on the reduced staff levels. Also question the benefits in terms of improving air quality as the rolling driver CPC training includes in the syllabus “driving effectively, efficiently to reduce emissions and improve safety.”</p> <p>PROPOSE to remove this as an Action.</p>
23	Borough fleet actions	Increasing the number of hydrogen, electric, hybrid, bio-methane and cleaner vehicles in the borough's fleet	All lease cars are hybrid/electric. Continuing to work with LoCity to consider further uptake of vehicles.	Added to the fleet another HY-BRID refuse vehicle to work on Lewisham market; this takes the total to 2.
24	Borough fleet actions	Accelerate uptake of new Euro VI vehicles in borough fleet	REVISED: 48 trucks will be upgraded to Euro VI during 17/18. Procurement in process.	<p>Reduced the order to 33 from 48 due to fleet rationalising and route analysis.</p> <p>The next step is to replace 15 Euro 5 refuse trucks and 49 Euro 5 buses before the ULEZ deadline (Oct 2020), which may reduce due to further rationalisation. Once this next order is placed and delivered all of LBL fleet will be at Euro 6.</p> <p>Any short-term hired in vehicles that are required are always Euro 6 as standard.</p>
25	Borough fleet actions	Smarter Driver Training, or equivalent, for drivers of vehicles in Borough Own Fleet i.e. through training of fuel efficient driving and providing regular re-training of staff	Driver training is on-going in order to comply with driver CPC regulations.	Continue to run CPC training which includes in the syllabus “driving effectively, efficiently to reduce emissions and improve safety.”

ID	Action Category	Action	Progress and planned action presented in 2016 ASR	Progress 2017 and Planned Future Action
26	Localised solutions	Improvement and Introduction of green spaces in new developments through the Planning process by conditions and S106 obligations.	Charlottenberg Park in New Cross and Surrey Canal Linear Park in Deptford have both opened in 2016	See Action 5 for further information. Also, new linear park for Pepys Estate being extended, opening up the former canal bridge, to connect the Deptford Wharves development. Proposals for improving Beckenham Place Park in progress over 2017. Lewisham Gateway confluence park planned progress 2018/2019
27	Localised solutions	Low Emission Neighbourhoods (LENS)	N/A	N/A
28	Cleaner transport	Discouraging unnecessary idling by vehicles near schools	Advice and guidance about anti-idling and impact on poor air quality provided to school head teachers in January 2017 for inclusion in their bulletins. Follow up planned for April 2017. The anti-idling participation piloted at one school and will be rolled out at priority schools to be identified before Summer 2017 in time for campaign.	Idling action events held at 3 schools. The end of year report provided details on success. Also a priority within the Lewisham Mayor's Air Quality Campaign (see introduction to Table)
28A	Cleaner transport	Carry out a Council-wide anti-idling campaign discouraging unnecessary idling by idling vehicles	Dedicated Communication officer currently reviewing all publicity and campaigns in relation to Air Quality for 2017.	Idling action events held at 3 schools. The end of year report provided details on success. Also a priority within the Lewisham Mayor's Air Quality Campaign (see introduction to Table)
29	Cleaner transport	Speed control measures e.g. lowering the legal speed limit to 20mph in built up residential areas	All Lewisham Roads included in 20 mph zones from September 2016. <i>See 'AQFA integration with LIP' for details on streetscape schemes to assist with 20 mph.</i>	The borough wide 20mph limit was implemented in September 2016. Monitoring has been carried out which has shown reductions in speed as a result. However, physical measures will be required on some streets to assist with compliance. These streets are currently being prioritised and potential measures identified. The borough is also encouraging TfL to introduce 20mph on the parts of the network that it is responsible for.

ID	Action Category	Action	Progress and planned action presented in 2016 ASR	Progress 2017 and Planned Future Action
30	Cleaner transport	Expanding car clubs and Increasing the proportion of electric, hydrogen and ultra-low emission vehicles in Car Clubs	<p>Car club bays provided via Planning in 2016: <i>See Table K for more details</i></p> <p>A strategy for the provision of Electric Vehicle Charging Points is currently being formulated. This action will be considered within the strategy. We are increasing the number of electric vehicle charge points across the borough, which would also facilitate the increase of car club activity, such as Blue City.</p>	<p>1 Car club bay provided at HAZELHURST COURT, BECKENHAM HILL ROAD, BROMLEY, SE6 3AG development.</p> <p>For all car-free developments we have secured car club memberships. For instance, in 2017 this was conditioned and discharged for 437-439 BROCKLEY ROAD, LONDON, SE4 2PJ, KENT WHARF, CREEKSIDE, LONDON, SE8 3DZ.</p> <p>Officers are currently in discussions with Zipcar (the borough's only current car club) about the potential introduction of further electric vehicles to its fleet. Zipcar has plans to gradually introduce more EVs to their Zipcar flex operations (point to point model). However, for the fixed bays it is harder to achieve without the necessary supporting infrastructure. Boroughs are limited on the degree to which they can assist with the implementation of EVCPs in fixed car club bays due to state aid rules. The Council is in discussion with other car club providers.</p>
31	Cleaner transport	Very Important Pedestrian Days (e.g. no vehicles on certain roads on a Sunday) and similar initiatives	Investigating road closures around school times at appropriate school locations. Three pilot schools (Tidemill, Lucas Vale and All Saints) for 2017. Already happens at Kelvin Grove Primary School.	Considering roads, but need to assess full impact on surrounding streets. For Walk to School Week in 2018, Athelney Primary School is trialling this and will feedback. VIP campaign will take place in September 2018.
32	Cleaner transport	Free or discounted parking charges at existing parking meters for zero emission cars	This will be considered within the Parking review which is planned for later in 2017.	This will be considered within the Parking review, which has been delayed and will go to Mayor and Cabinet at the end of 2018/19. Air quality is being factored into this review.

ID	Action Category	Action	Progress and planned action presented in 2016 ASR	Progress 2017 and Planned Future Action
33	Cleaner transport	Free or discounted residential parking permits for zero emission cars	<p>During the year (2015/2016) a total of 9,428 resident and business parking permits were issued, an increase of 4.5% on last year. Permits issued to lower emission vehicles and sold at a concessionary rate, represent 1.5% of the total which is a slight increase of 0.8% from that of last year. Further information see http://www.lewisham.gov.uk/myservices/parking/Pages/default.aspx</p>	<p>During the year (2016/2017) a total of 16,000 resident and business parking permits were issued. Permits issued to lower emission vehicles and sold at a concessionary rate was 345, represent 5.75% of the total which is an increase of 4% from that of last year.</p> <p>The Parking review, which has been delayed and will go to Mayor and Cabinet at the end of 2018/19, will consider charges and concessions. Air quality is being factored into this review.</p>
34	Cleaner transport	Surcharge on diesel vehicles below Euro 6 standards for Resident and Controlled Parking Zone permits	<p>Given the potential for the London Mayor to expand the ULEZ to include all areas of Lewisham, north of the South Circular (where the majority of resident and controlled parking zones are based), it is not considered appropriate to increase any financial burden further.</p>	<p>This will be considered within the Parking review, which has been delayed and will go to Mayor and Cabinet at the end of 2018/19. Air quality is being factored into this review.</p>

ID	Action Category	Action	Progress and planned action presented in 2016 ASR	Progress 2017 and Planned Future Action
35	Cleaner transport	Installation of residential electric charge points	<p>A strategy for the provision of Electric Vehicle Charging Points is currently being formulated. This action will be considered further after the production of this strategy. It will consider residential, car club and rapid charging provision.</p> <p>14 additional residential on-street sites have been approved for installation. Date of installation now planned for Summer 2017.</p>	<p>There are currently 29 EVCPs in 10 locations, including 6 in Council managed car parks.</p> <p>The Council will be consulting on its EVCP strategy in late spring/early summer 2018, with a final document approved by the end of the year. This will set out our plans for expansion of the charging network over the next four years (to 2022).</p> <p>In partnership with Source London we are currently consulting on a further 14 sites for 7kw chargers, with a view to seeing these implemented by the end of 2018, subject to consultation. This has been delayed from last year in order to agree on legal arrangements.</p> <p>Officers are also starting to talk to other providers about introducing lamp column charging and complementing the Source London network with additional 7kw chargers run by other operators.</p>

ID	Action Category	Action	Progress and planned action presented in 2016 ASR	Progress 2017 and Planned Future Action
35A	Cleaner transport	Carry out a campaign to promote the use of electric charge points within the borough.	A campaign will be coordinated after the production of the strategy and after the EVCPs expansion. It is likely that this will take place during the Summer 2017. See above.	<p>Campaign wasn't carried out in 2017, as the production of the strategy was still being consulted internally. Lewisham had an Air Quality Conference in March 2018 where the principles of the strategy were communicated.</p> <p>As part of the launch of the draft EVCP strategy, public consultation, the Council will make a call for suggestions for new EVCP locations. A publicity campaign is planned for the end of the 2018/19 financial year, with details on new locations.</p>
36	Cleaner transport	Installation of rapid chargers to help encourage the take-up of electric taxis, cabs and commercial vehicles (in partnership with TfL and/or OLEV)	Working with TfL on where spaces can be allocated within Lewisham. This will be considered within the strategy being drawn up. This is also being considered within the Council's strategy for EVCPs provision.	Officers are working in partnership with TfL to progress a number of rapid charging points. An initial long list of 20 sites across the borough (mixture of land ownership) has been identified, with two sites implemented to date.

ID	Action Category	Action	Progress and planned action presented in 2016 ASR	Progress 2017 and Planned Future Action
37	Cleaner transport	Reprioritisation of road space; reducing parking at some destinations and/or restricting parking on congested high streets and A-roads to improve bus journey times, cycling experience, and reduce emissions caused by congested traffic	<p>See link for the Annual Parking report: http://www.lewisham.gov.uk/myserVICES/parking/Pages/default.aspx</p> <p>The 2016 report will soon be available to review on-line.</p>	<p>See link for the Annual Parking report (2016/17): http://www.lewisham.gov.uk/myserVICES/parking/Pages/default.aspx</p> <p>The total number of CPZs operating in the borough at the end of 2016/17 was 22. This will increase to 23 in 2017/18 as part of the CPZ implementation programme.</p> <p>Also approval for 18/19 CPZ programme has been received with proposals for a further four zones. Designs have gone through public consultation in September 2017, the full results of this consultation have not been published (expected June 2018). Expect detailed design to start in 2018, and construction to start in 2019 for approximately 1 year.</p> <p>Over the past 6 months the Council have been assessing sites for the locating of bike hangers; consultation on the 1st phase of hangers is complete, and we are awaiting the award of the new contract to the supplier to start installation. Once the contractor is on board the Council will continue to roll out phases of hangers every 6 months, funding dependant.</p>

ID	Action Category	Action	Progress and planned action presented in 2016 ASR	Progress 2017 and Planned Future Action
38	Cleaner transport	Provision of infrastructure to support walking and cycling	<p>Quietway 1 completed and further work on linking the existing cycle route – Waterlink Way – to Quietway 1 is ongoing.</p> <p>Details are to be reported to TfL through a LiP yearly report.</p>	<p>3 Quietway routes are in development with completion expected in 2019. Lewisham Council was successful in securing feasibility funding for the Deptford parks Liveable neighbourhoods fund from TfL. This feasibility work is going to be carried out over 2018 to inform concept designs hopefully available by early 2019. Schemes include: re assigning road space to create a pocket park, reducing traffic and greening roads, creating a traffic-free walking route from the River Thames to New cross via a new green way and other smaller intervention identified through public consultation.</p>
39	Cleaner transport	Develop a ‘stand-alone’ Cycling Strategy for the borough.	<p>Being developed 2016/17 and to be published in 2018.</p> <p>Internal reporting and LiP yearly reporting.</p>	<p>The Cycling Strategy was adopted in late 2017.</p>
40	Cleaner transport	Increasing cycle parking	<p>Ongoing initiative.</p> <p>Already being provided but will be increased year on year. Internal reporting and LiP yearly reporting on increase in parking.</p>	<p>See Section 10 of the Cycling Strategy.</p>

ID	Action Category	Action	Progress and planned action presented in 2016 ASR	Progress 2017 and Planned Future Action
41	GLA AQ FOCUS AREA 127 & parts of 132 Cleaner Transport	Development of a Zonal Construction Logistic Framework for the Evelyn Street Corridor	Scoping report completed, and drafting of the Zonal CLP. Contact made with all construction sites and relevant stakeholders to provide effective communication and transport planning/strategy. Monitoring locations and provision being considered. 2016 Progress Report currently being reviewed by Stephen Inch from TfL.	The main focus of work following the completion of the CLP has been to engage with developers in the Evelyn Street area. The primary engagement mechanism has been the three ESC CLP Forum meetings held in 2017. Air Quality (AQMesh) and traffic monitoring have been installed on Evelyn Street and Deptford Church Street in partnership with Kings College, to establish the current baselines against which the additional construction traffic can be monitored. More details on progress: http://www.llecp.org.uk/evelyn-street-clp-project
42	GLA AQ FOCUS AREA 125, 130 & 133 Public health and awareness raising	Provision of public art along the Brockley Corridor to raise awareness on air quality	Installation of public art being progressed and to be completed February 2017. Publicity to be produced and update to Local Assembly in March 2017.	All art installations completed. Update provided to Local Assembly in March 2017
43	GLA AQ FOCUS AREA 130 & 133 Cleaner Transport	Road Layout changes along the Crofton Park area of the Brockley corridor	Ongoing. Reporting back to Local Assembly in March 2017.	Progress given at Local Assembly in March 2017 . A public consultation was carried out in 2017: https://www.pclconsult.co.uk/projects/crofton-park-2/
44	GLA AQ FOCUS AREA 125 to 133 Cleaner Transport	LiP projects	See Table K.3	
45	GLA AQ FOCUS Area 127 Cleaner Transport	Liveable Neighbourhood Scheme 'Deptford Parks'.		NEW ACTION for reporting at next ASR

ID	Action Category	Action	Progress and planned action presented in 2016 ASR	Progress 2017 and Planned Future Action
46	GLA AQ FOCUS AREA 127 Cleaner Transport Public Health and Awareness Raising	DEFRA Project: 'Cleaner Villages' Business engagement at Deptford High Street, to reduce impact of delivery.		NEW ACTION for reporting at next ASR
47	GLA AQ FOCUS AREA 131 Cleaner Transport Public Health and Awareness Raising	DEFRA Project: 'Cleaner Villages' Business engagement at Lewisham Town Centre, to reduce impact of delivery.		NEW ACTION for reporting at next ASR



Completed Actions



New Actions

Appendix B

2017 Progress Report for Mayors Air Quality Fund 2016-2019

Mayor's Air Quality Fund 2017-2018 Progress Report

This completed report should be sent to your project manager, copying aqesponsorteam@tfl.gov.uk, and poppy.lyle@london.gov.uk by Wednesday 31st **January 2018**. Please complete one report for each successful bid from the MAQF

Name of person completing this report: Christopher Howard

Scheme title: **Evelyn Street Framework Construction Logistics Plan**

Section 1: Budget

Q1 Finances Please review/complete the table below according to the guidance to provide information on expenditure and forecast through the programme. Of the total Match Funding (MF), please state the amount which is from the Local Implementation Plan (LIP).

Budget / Spend Source	Year 1 (16/17) Actual (A) £ '000 ¹	Year 2 (17/18) Awarded (B) £ '000 ²	Year 2 (17/18) Spent to end of 2017 (C) £ '000	Year 2 (17/18) Forecast whole Financial Year (D) £ '000 ²	Year 3 (18/19) Indicativ e (E) £ '000 ^{2,3}	Total (16-19) Indicativ e (F=A+D+E) £ '000 ²
MAQF	£49,250	£78,000	£40,624.80	£78,000	£78,000	£205,250
Total MF	£103,250	£101,000	£54,787.30	£101,000	£101,000	£305,250
Amount of MF coming from LIP	£54,000	£23,000	£14,162.50	£23,000	£23,000	£100,000

¹Funds taken from the TfL Portal

²Please state the allocation as per your approval letter

³If your Total (F) is more than £200k please provide a quarterly forecast for Year 3 (E)

Please note that these figures must be an accurate representation of your spend on the project and may be subject to an audit.

Q2 Underspent

If Year 2 Forecast (D) is less than the Awarded funding for Year 2 (B), please state the reasons for the difference (B-D)

No underspend expected.

Section 2: Project Overview

Q3 Outputs Please provide details of outputs achieved and their associated costs throughout Year 1 and 2 of the programme. Please include other key activities such as project management and communications as outputs

Outputs and key activities proposed in your bid (parklets, no idling days, etc.)	Status update % Completed	Associated costs during 2016/2017 £ '000	Associated costs during 2017/2018 £ '000	Total expenditure £ '000
Scoping rpt for Framework CLP	100	£71,750		£71,750
Finalised Framework CLP	100			
Quarterly Forum meetings	Ongoing		£38,000	£38,000
Drop in Events	Ongoing			
Site Visits for data gathering and engagement	Ongoing			
Appointment of Kings for Monitoring validation and assistance			£14,162	
Installation of Air Quality Monitoring		£10,000		£10,000
Installation of traffic counters			*£10,000	*£10,000
Project Management and monitoring		£21,500	£48,838	
Total		£¹103,250	£² 101,000	£204,250 (+*=£214,250)

¹ The total actual should be the same as the figure A in Q1

² The total forecast should respond to D in Q1

* **Additional budget (not included in original match funding) found for purchase/installation of traffic counters.**

Q4 Achievements Please highlight key achievements so far.

The main focus of TRL's work following the completion of the CLP has been to engage with developers in the Evelyn Street area to inform them of the plan, the objective to reduce NOx and other harmful emissions, and to encourage adoption of good practice that will assist in the mitigation of the increased construction road traffic (primarily HGVs), workforce travel and Non Road Mobile Machinery (NMRR).

The primary engagement mechanism has been the ESC CLP Forum meetings.

To date three have been held in Deptford (fourth to be held on 30 Jan 18).

These have been very well attended by developers, construction companies, service providers, Lewisham Council Officers, Lewisham Councillors, and TfL Officers.

The Forums have provided information on a variety of subjects, including:

- The origin and aim of the ESC CLP
- Construction traffic good practice measures
- NRMM standards and good practice
- The Thames Tideway project and other cross area developments
- Kings College air quality monitoring
- Alternative low emission plant and machinery options
- Construction consolidation options
- Toolkits for use by developers
- Workplace travel planning
- Open forum discussions on sharing good practice and collaborative working

(Proposed works around Cycle Superhighway and implications to be discussed at the 30 Jan 18 forum)

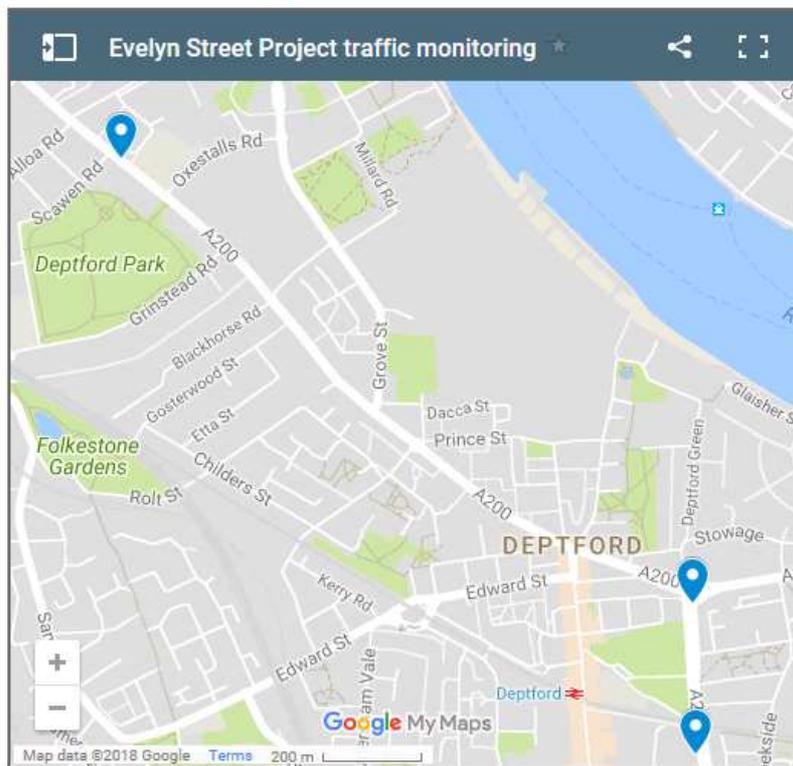
Going forward the Forums will include site by site updates on progress, and sharing of lessons learnt from an AQ perspective. This also allows sites to benefit before development begins.

Since the launch of the Forum, London Borough of Lewisham has made Forum participation a planning condition.

The mechanisms for additional engagement have included one to one visits to discuss on-site activity and local plans, including vehicle idling, the effective and efficient use of holding areas and safe vehicle routing.

Air Quality (AQMesh) and traffic monitoring have been installed on Evelyn Street and Deptford Church Street in partnership with Kings College, to establish the current baselines against which the additional construction activity can be monitored.

Measurement Locations



Work in the forthcoming months include: maintaining the development database; gathering predicted construction road traffic movements from developers to model increasing traffic expectations; collecting construction traffic data from developers, planning forthcoming Forums; developing a wider public engagement strategy based on real time development activity.

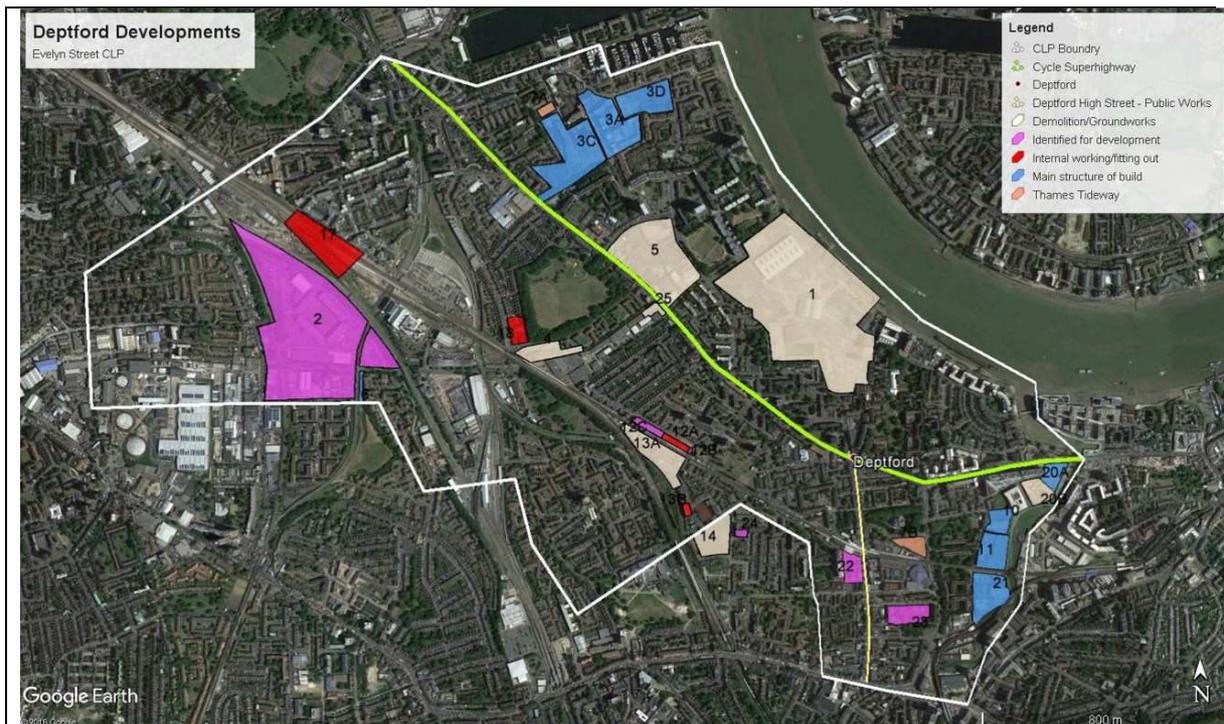
The public have also been engaged. At this stage this has been through local councillors, community groups including:

- Deptford Neighbourhood Forum
- Citizen Sense
- London Low Emission Partnership
- Community Libraries in Lewisham

A drop in session was held on 25 Jan 18 at the Deptford Lounge to give the public the opportunity to discuss the measures being taken to mitigate against negative AQ resultant from development activity.

Q5 Lessons learned Please briefly outline any lessons you have learned during this year and what challenges you foresee in year 3.

It had been anticipated that by this time in the project we would have more construction sites active. Below is an image of the sites. The two main sites that were anticipated to have the most impact on traffic and air quality was Convoys wharf (1) (currently on hold) and New Bermondsey (2) (currently on hold). We have had several of the other main sites engaged in the Forum, but haven't had as much success with the smaller sites. This is being addressed more fully and we're making progress now with the smaller sites and anticipate better engagement.



We are also looking at setting up an accreditation scheme with LLECP, to encourage sites to come into the Forum and cooperate in providing necessary data to assess impacts and measure against the real time monitoring and traffic count data.

Q6 Marketing and Communications Please include links to any websites or webpages, and attach copies of any press articles, photos and/or other communications. We are particularly keen to receive high resolution photos that we can use to promote your project.

A dedicated website has been produced for public to view and understand the project:
<http://www.llecp.org.uk/evelyn-street-clp-project>

This also includes the link to the recent drop in event publicity
<http://www.llecp.org.uk/sites/default/files/Dropinsessionlewisham.pdf> . This was advertised on the Lewisham website: <https://www.lewisham.gov.uk/inmyarea/events/Pages/Event-info.aspx?eventid=11331&recurrenceid=25%2F01%2F2018+09%3A30%3A00> and also on the Deptford Lounge website: <http://deptfordlounge.org.uk/featured-events/developments-in-the-borough-of-lewisham-informal-drop-in-session>

We are also looking at (as stated above) introducing an accreditation award scheme to the LLECP, as an incentive for contractors to opt into the scheme.

Publicity will be increasing as more sites become active and we establish monitoring data and any necessary interventions.

Please attach an up-to-date project plan.

Role	Responsibilities	Who	Progress & Actions
ESC CLP Day to Day Management	Organise the regular ESC CLP forum	TRL	2 Undertaken and very well supported. 3 rd Forum on 28 Nov TRL organising speakers (2) and slides. Notify LBL preceding Friday of progress and numbers
	Engage with new and existing stakeholders		Ongoing task TRL to notify LBL of unresponsive hard to reach developers and agree an action plan
	Lead the implementation of ESC CLP selected toolkit measures		These include site transport planning, Non Road Mobile Machinery standards
	Lead the analysis of potential issues (with Support function and LBL Network)		None encountered to date due to slow progress of Convoys Wharf and New Bermondsey – the 2 largest sites and AQ and traffic counts not being in place until Nov 17. Regular liaison with Timberyard (3 rd Largest) has resulted in traffic plan and new NRMM being deployed TRL liaising with active sites to obtain patterns of construction traffic active in ESC builds
ESC CLP Management support	Data management	TRL	Non yet forthcoming TRL to action as above
	Preparation of the monthly information pack		This has e been sporadic. However, all requests from LBL for input to higher level reports have been met in 24hrs or less. Up to date maps and site information pack supplied. TRL to provide LBL with a monthly summary of activity and meet prior to Forum meetings at Catford offices.
	Support the engagement with new and existing stakeholders		Ongoing activity

	Provide support for the analysis of potential issues		Not progressed again through lack of development With implementation of traffic count and AQMesh equipment on Evelyn St and Deptford Church St, TRL & LBL to liaise to correlate increases from baseline measurement (once set) and construction traffic gate counts to determine de-confliction interventions to be suggested.
	Prepare inputs for TfL highways data modelling and LBL AQ modelling		Not progressed again through lack of development As above
	Provide support for the ESC CLF (inc. minutes)		Undertaken
	Support the implementation of selected toolkit measure		Direct liaison with new sites as they roll out Currently working with Timberyard – visited 17 Nov 17 and beginning of Jan 18.
ESC CLP Monitoring	Act as the day-to-day contact for any operational issues with sites	LBL	LBL working with Kings in providing monitoring and establishing correlation with traffic count information.
Other roles	Chairing the ESC CLF	LBL	LBL introduction with TRL leading Forums
	Developing location specific communications plans	TRL with LBL Communications Team	TRL to staff and provide a public information ‘drop in’ session in Deptford Lounge before Jan 18 Forum Meeting. TRL to liaise with LBL Comms Team to ensure maximum publicity.
	Update highways network impact assessment	TfL	TRL to request monthly updates
	Maintains and shares an overview of the current expected timings of new developments in the Deptford area	LBL Planning	TRL to request monthly updates

	Support the bimonthly assessment of current road impacts to flag key issues	LBL Highways team	TRL to request monthly updates
	Issuing alerts to ESC CLP mailing list of emergency works	LBL Highways team	TRL to request monthly updates
	Maintains a high level list of longer term potential roadwork events (3 month to 5 year window)	LBL Highways team	TRL to request monthly updates

Section 3: Benefits and strategic alignment

Q7 Monitoring and Success Criteria. Please provide information on the following points:

- Please provide any data you may have for: air quality improvements, increase in walking and reduction of vehicle kilometres
- If you proposed a monitoring programme in your bid, please provide details of baseline monitoring undertaken and planned. Could you please provide reasons if there is a variation with the planned monitoring in your original bid.

Since the original bid we have employed Kings ERG to provide the expertise surrounding the monitoring and the objectives are:

- Assess the NO2 concentrations along Evelyn St in roadside locations relevant to public exposure
- Assess these NO2 concentrations in relation to a nearby roadside location outside the construction logistic plan area and to concentrations measured at a nearby background location
- Relate these concentrations to the traffic measurements to detect changes due to the construction logistics plan

Through the use of two AQ Mesh units and three traffic classification units, the ambient NO2 concentrations measured in the CLP, and the differences between them and the local traffic and urban background sites, will be compared to traffic flows, and in particular larger vehicles relating to construction activity, measured at each site to establish whether changes in traffic flow and vehicle mix are related to changes in concentration.

The costs for this was also LLECP Match Funded.

The monitoring data is at the beginning stages of assessment, but the purpose will be to consider against the site data and information provided on vehicle movements to and from sites as to the potential for interventions to avoid peak concentrations and reduce overall impacts during the daily time periods.

Q8 Strategic alignment The Mayor’s approach to improving London’s air quality is described in the draft London Environment Strategy (LES) and Mayor’s Transport Strategy (MTS). Whilst these strategies are new we would like to try to understand how your schemes align to them. Please assess your outputs during year 1 and 2 against each of these elements. Please rate each element 1:low; 2:medium; 3:high.

LES Policy	Output description	Score (1 low-3 high)
Make sure that London and its communities, particularly the most vulnerable and those in priority locations, are empowered to reduce their exposure to poor air quality	The project purpose is to manage the emissions from construction traffic in the area. Although it hasn’t focused on empowering communities to reduce exposure, in itself it will through direct interventions, where appropriate.	1

Improve the understanding of air quality health impacts to better target policies and action	With Kings ERG involvement we anticipate that this will be a pilot project in monitoring impacts from construction traffic that can be used to inform policies and actions for other sites in London.	2
Reduce emissions from London's road transport network	This is the key purpose behind this project, as outlined in the above report	3
Reduce emissions from non-transport sources, including by phasing out fossil fuels	Although the primary focus is on construction traffic, there is also engagement on NRMM, with the local construction companies. Also presentations to the local contractors has included low emission site equipment e.g Hybrid Power Solutions	2
Encourage the uptake of ultra low and zero emission technologies	As indicated above, discussion and information is shared with developers on different technologies available.	2

Appendix

2nd Quarterly Report previously submitted in year 2017-2018

Appendix – 2nd Quarterly Report

MAQF Evelyn Street Corridor (ESC) – 2nd Quarterly Update

The previous update was provided in July for the progress in the first Quarter of 2017/2018:

‘Evelyn Street Framework Construction Logistics Plan UPDATE July 2017

Since the previous Progress Report the Framework Construction Logistics Plan has been finalised and is available to contractors via an ftp site, along with slides and meeting notes of Forum meetings.

There has now been two Forum meetings, with numbers near to 30 for each of the events, including contractors, along with other external and internal stakeholders. The developers about to or anticipating starting work in Deptford are fully engaged with our consultant TRL; attending the forums and are receptive to improvement action suggestions (such as the reduced emission generators) and our consultant TRL are in the process of obtaining projected vehicle forecast data from contractors which will be analysed and discussed as to implications and interventions that may be necessary. At the moment there are no projected pinch points identified and no immediate indications that any holding areas are required. This may change. The largest areas of development – Convoys and New Bermondsey are at least 12 months away from work commencing. The existing large developments have been slow to engage but further contact is being made with them to bring them on board.

The Council have appointed Kings ERG for the duration of the project who are providing detailed analytical assessment of the concentrations of NO₂ measured inside and outside the CLP area and relating these concentrations to the traffic measurements to detect changes due to the construction logistics plan and to identify effectiveness of measures in managing air quality and potential for interventions. There have been two AQ Mesh’s purchased which are in the process of being put out, along with two traffic counters/classifiers. We have spent some time establishing the correct locations in relation to picking up traffic from the main sites and have also have been working closely with TfL, having agreement to use their Drakewells system. There will also be another AQ Mesh provided by Kings ERG that will be collocated at our New Cross Site monitoring station, with the AQ Mesh’s rotating to ensure calibration and accuracy throughout the length of the project.

The Forum meetings will be held five times in this year, with the dates booked for future meetings as follows:

- **Tuesday 26th September 2017**
 - **Tuesday 28th November 2017**
 - **Tuesday 30th January 2018**
 - **Tuesday 27th March 2018’**
-

Milestones achieved over the 2nd quarter

Since this update, the Forum meeting on the 26th September was cancelled, as it was too near the Summer and there was further work on the ground needed in order to provide useful update and engagement for the Forum.

TRL Work

The main focus of TRL's work following the completion of the CLP has been to engage with developers in the Evelyn Street area to inform them of the plan, the objective to reduce NOx and other emissions, and to encourage adoption of good practice that will assist in the mitigation of the increased construction road traffic (primarily HGVs), workforce travel and Non Road Mobile Machinery (NMRR).

The mechanisms for engagement have included one to one visits to discuss on-site activity and local plans, such as vehicle idling, holding areas and safe routing. The primary engagement mechanism has been the ESC CLP Forum meetings.

For information purposes the areas covered within the Forum meetings were:

- The origin and aim of the ESC CLP
- Construction traffic good practice measures
- NRMM good practice
- The Thames Tideway project
- Kings College air monitoring
- Alternative low emission plant and machinery options
- Open forum discussions on sharing good practice and collaborative working

TRL have this quarter been updating the progress of developments in the area, which can be seen below and visiting/contacting the sites. See Appendix A

Monitoring

Two AQ Meshes have now been in place for several months. Kings have applied the scaling from the co-location period to both of the Lewisham AQMesh and there is currently a good correlation with the data. A further AQMesh is still to be provided by Kings at the permanent continuous New Cross AQ Site and these will be rotated to ensure the two measuring at Deptford Church Street and Evelyn Street (near Deptford Park Primary School) are kept within calibration.

There are 3 Traffic Counters planned for installation, where we've worked with TfL and our highways; two of the counters are planned for week commencing the 25th September with the third installation delayed to around the 8th Oct due to road works being undertaken by Thames Tideway on Deptford Church Street. These are located near to the AQ Mesh Locations.

Communication

LBL have looked at the potential for a recognition scheme for contractors who work with the project under the LLECP. Daniel from Kings is progressing this with the GLA . The potential for the project is to have different levels of award (bronze, silver, gold etc). We're keen to progress this, as we see it as an effective engagement mechanism providing benefits and kudos for the contractors. For this project, part of the recognition scheme would need to have a criteria for how they're managing traffic movements, in addition to having site specific criteria.

Milestones expected in the 3rd quarter

TRL

In the forthcoming months include: maintaining the development database (see Appendix A); gathering predicted construction road traffic from developers to model increasing traffic expectations; collecting construction traffic data from developers, planning forthcoming Forums; developing a wider public engagement strategy based on real time development activity.

Monitoring

Kings have met with Julia McNally from a company from AirScan <http://www.iknaia.co.uk/airscan/> who may be able to lend us some sensors that pick up the unique WIFI or Bluetooth code being emitted from mobile devices in vehicles. This will allow us to track the device passing through the ESC route and give some idea of travel time/ traffic flow speed which would allow us to see where the greatest level of congestion is or whether there are regular windows when the traffic flows move more freely. This could be useful for scheduling deliveries.

The current traffic counters will give a breakdown of vehicle type and speed at the point they cross the tube but not the time it takes for a vehicle to cross two points in the system so King's are thinking that this may add some really useful data. This is being discussed and there is the potential that this will be developed in the next quarter.

Communication

TRL to produce public engagement plan for agreement with LBL.

Risks and Issues

The framework defines the six components of the plan:

- Coordination
- Information management
- Communications
- The Evelyn Street Corridor Construction Logistics Forum

- Toolkit of measures
- Monitoring & enforcement

We have had two successful forum meetings with engagement from 6 of the major sites in the area, two of which, i.e. Convoys and Surrey Canal Road are not planned for a while. The importance for us in the time ahead is to maintain the interest but to widen the sites involved. Key to this is communication, coordination and information management. If we're unable to progress some recognition scheme the engagement opportunities will be reduced, as there will need to be some incentive for developers, particularly smaller developers to become active members of the Evelyn Street CLP forum.

The Council have employed Kings ERG to provide the monitoring and coordinate the impact from the construction traffic. This will be a key means by which we'll manage the sites and deliveries, so this is an important area for us. Although we have been visiting sites and TRL have been contacting contractors via visits too, we'd like to be able to provide some clear output on the effectiveness of the project based on objective measurements on the road network. This will be a challenge as it is a new area for development, but could also be of value for the industry, so is an important aspect of the work and is going to be developed further over the next quarter.

Finance

The project is being managed successfully. We have received additional funding towards the costs for the traffic counters via our transport team. We are on target to spend all the money designated for the project for this year.

APPENDIX A : ES NEW MAP plus numbers Sep 17.

Appendix C

Summary Report of Idling Action events

Lewisham Borough Council summary sheet April 2018

Project team lead: Paula Owen

Local authority contact: Christopher Howard/ Carlene Campbell

Summary findings

- Lewisham council concentrated all of its idling activities around schools.
- Event 1 took place in conjunction with Holbeach primary school Catford
- Event 2 took place at Dalmain Primary School in Catford
- Event 3 took place at St James Hatcham Primary School in New Cross

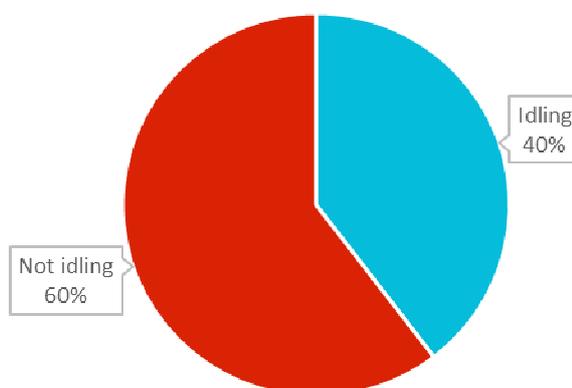
Overall numbers for the Lewisham Campaign

Where were the volunteers recruited from?	Council’s regular communication channels, personal recruits from the project lead, the school’s parents community
Number of volunteers trained	20
Number who took part in events	29
Number of action days that took place	3
Number of drivers that switched off	11
% of idling drivers that switched off when asked	58%
Number of people who made a pledge	52 (79%)
Total children in assembly	~700

Data in graph format

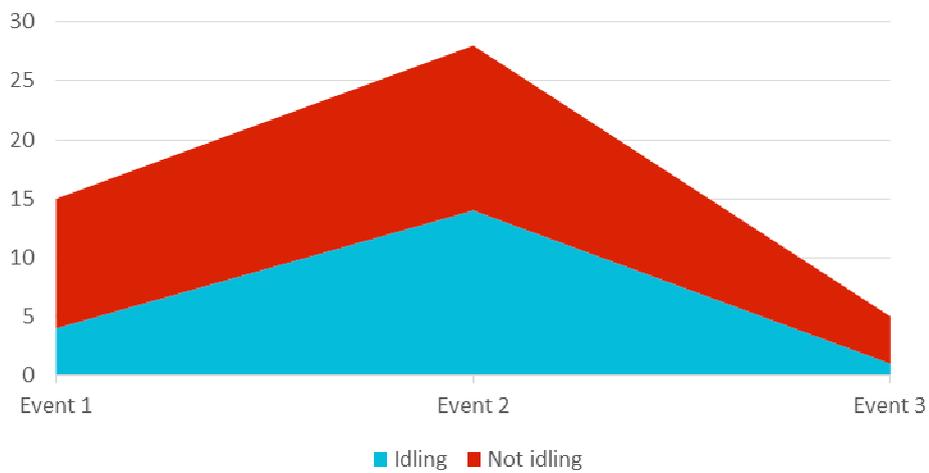
	Event 1	Event 2	Event 3	All Events
Idling	4	14	1	19
Not idling	11	14	4	29
Total	15	28	5	48

Proportion idling



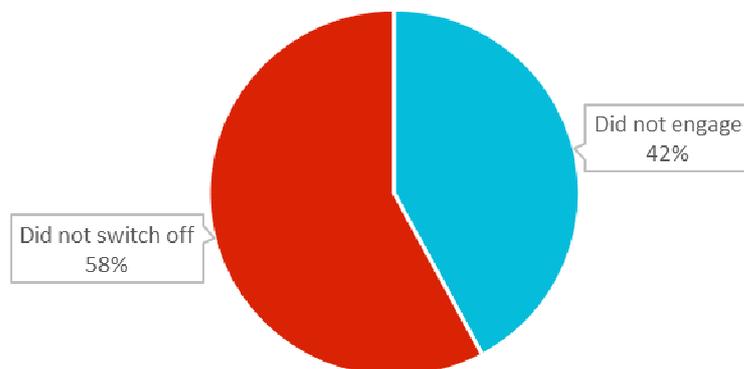
	Event 1	Event 2	Event 3	All Events
Car	12	20	5	37
Minicab		1		1
Motorcycle		1		1
Pedestrian	6	4	8	18
Taxi	1	1		2
Van	2	5		7
Total	21	32	13	66

Number of vehicles by event



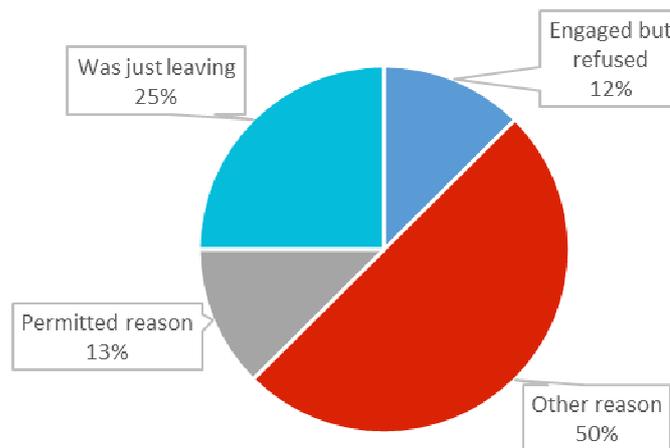
	Event 1	Event 2	Event 3	All Events
Did not switch off	3	5		8
Switched off	1	9	1	11
Grand Total	4	14	1	19

Driver response

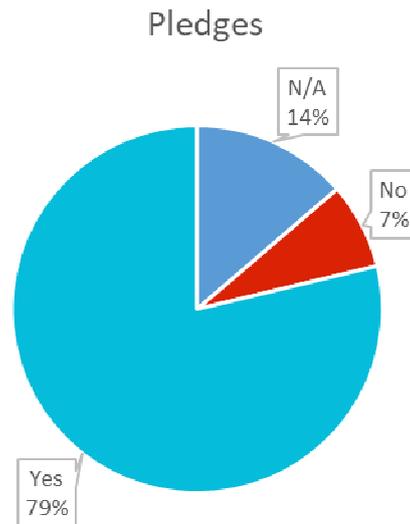


	Event 1	Event 2	Event 3	All Events
Engaged but refused	1			1
Other reason	2	2		4
Permitted reason		1		1
Was just leaving		2		2
Grand Total	3	5	0	8

Reasons for not switching off



	Event 1	Event 2	Event 3	All Events
N/A	1	6	2	9
No	3		2	5
Yes	17	26	9	52
Total	21	32	13	66



Project lead observations

This year was Lewisham Council's first year as part of the project, so the first months were spent getting the borough up to speed with the project and ordering in the collateral and printed materials.

The decision was made to concentrate on school based activities in the borough, and a short hit-list of most polluted school was drawn up. Unfortunately we did not get a very enthusiastic response from the schools targeted and so the project got off to a slow start with the first event taking place at the end of January. However, when the offer of an event was offered up to all schools in the borough the response was much more positive and we ended up with schools on a waiting list for an event.

- **Event 1** in conjunction with Holbeach primary was well attended as the school had a very committed parent campaigner whose own daughter had sadly died of an asthma attack some years previously. There was a good range of vehicles in the vicinity with a number of idling and non-idling vehicles interacted with as well as dozens of leaflets etc given out to parents as they collected their children. The assembly was well received and the simultaneous event with a selected group of KS2 children playing on the giant game was a success. Leaflets were given out at the school gates to approximately 50 parents
- **Event 2** conducted in partnership with Dalmain primary school in Catford. This was another big success, mainly due to the engaged parent network that was proactive in recruiting volunteers to attend the event. The assembly was delivered to the whole of KS2 and the game was played with a selection of KS2 pupils simultaneously to the parent volunteers going out to talk to motorists. Leaflets were given out at the school gates to approximately 50 parents
- **Event 3** happened in partnership with St James Hatcham primary in New Cross. This unfortunately was not well attended by parent volunteers, but this was due to a very late change of venue for the event which was originally going to be taking place at a different school, but with one week to go the Head cancelled. The assembly was delivered to all of KS2 children, years 3-6, and the campaign staff and council staff were outside at close of school day to talk to mainly the car drivers and giving leaflets out to approx. 30 parents.



In general, as these were school based events, there was a limited number of cars and other vehicles interacted with. Also a minority of the vehicles were idling, 40%. Hence even though there were only 8 idling vehicles found at all 3 events, this constituted a 42% refusal rate. However, 38% of these refusals were because they were just leaving anyway or they had a permitted reason for idling their engines.

The bulk of the interactions were with parents picking up their children at the school games, where approximately 130 leaflets and other collateral were given out at the three events in total.

Appendix D

Lewisham Air app and Lewisham Clean Air Pledge - business card

Download the **Lewisham** **Air** app



- Find low-pollution travel routes
- Sign up for air pollution forecast alerts
- See live air quality data
- Hear about air quality news and events
- Find out what Lewisham Council is doing to improve air quality

www.lewisham.gov.uk/airquality

Help improve air quality in Lewisham

If you live in the Lewisham borough, you can sign the clean air pledge and commit to do at least one of the following things:

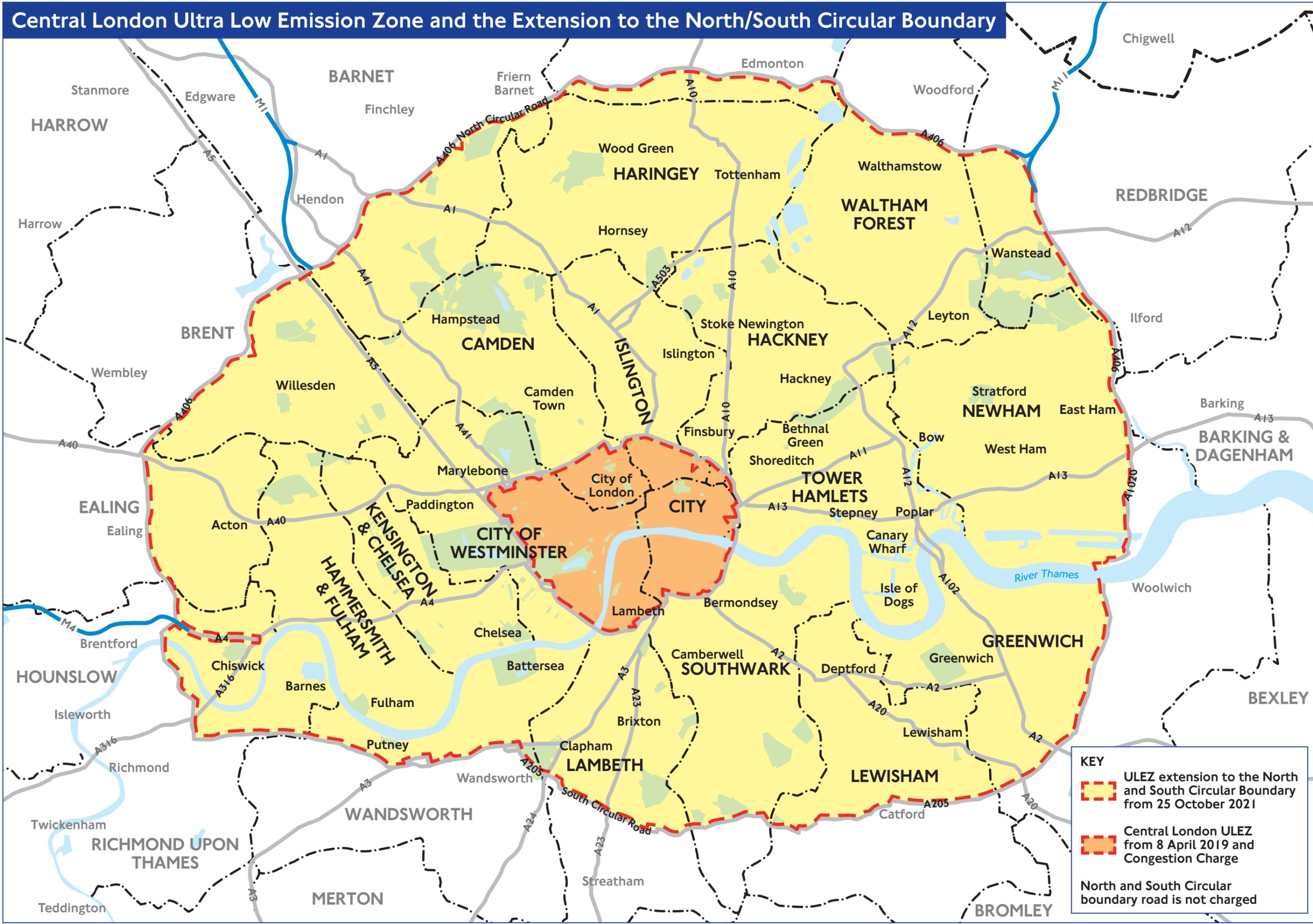
1. Walk, cycle or use public transport instead of driving your car.
2. Download the Lewisham Air app to get air quality news and alerts.
3. Make your next car an electric or a hybrid.
4. Walk your children to school.
5. Switch off your car engine when you are stationary, loading or waiting.

Sign the pledge at
[www.lewisham.gov.uk/
airpledge](http://www.lewisham.gov.uk/airpledge)

Appendix E

Expansion of the ULEZ: Summary figures and charts

Central London Ultra Low Emission Zone and the Extension to the North/South Circular Boundary



KEY

- ULEZ extension to the North and South Circular Boundary from 25 October 2021
- Central London ULEZ from 8 April 2019 and Congestion Charge
- North and South Circular boundary road is not charged

ULEZ expansion

TfL predicted exposure and impact change

Change in concentration 2021

- Generally five to ten percent reduction in concentration levels at roadside, but up to 20 percent in some locations.
- 64 percent reduction in road km exceeding NO2 limit values.

Impact on Population Exposure

- Over 100,000 fewer people living in areas exceeding legal NO2 limits London-wide in 2021
- 77 per cent reduction London-wide, 96 per cent reduction in Outer London
- 71 percent fewer school in areas exceeding legal limits in 2021
 - *On their projected data no schools, hospital or care homes in Lewisham will exceed the NO2 limit levels once the 2020 proposal for the heavy vehicle London wide ULEZ has been introduced.*

SEE FIGURES FOR POPULATION EXPOSURE – extracted from the consultation proposal documentation.

Figure 46: The impact of the proposals on populations living in areas of exceedence 2020–2025

Baseline
2020

With Proposals

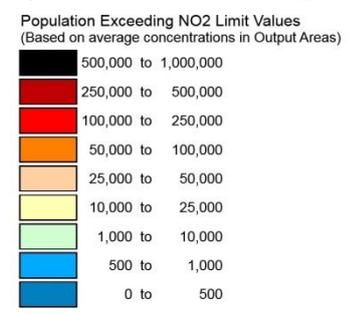
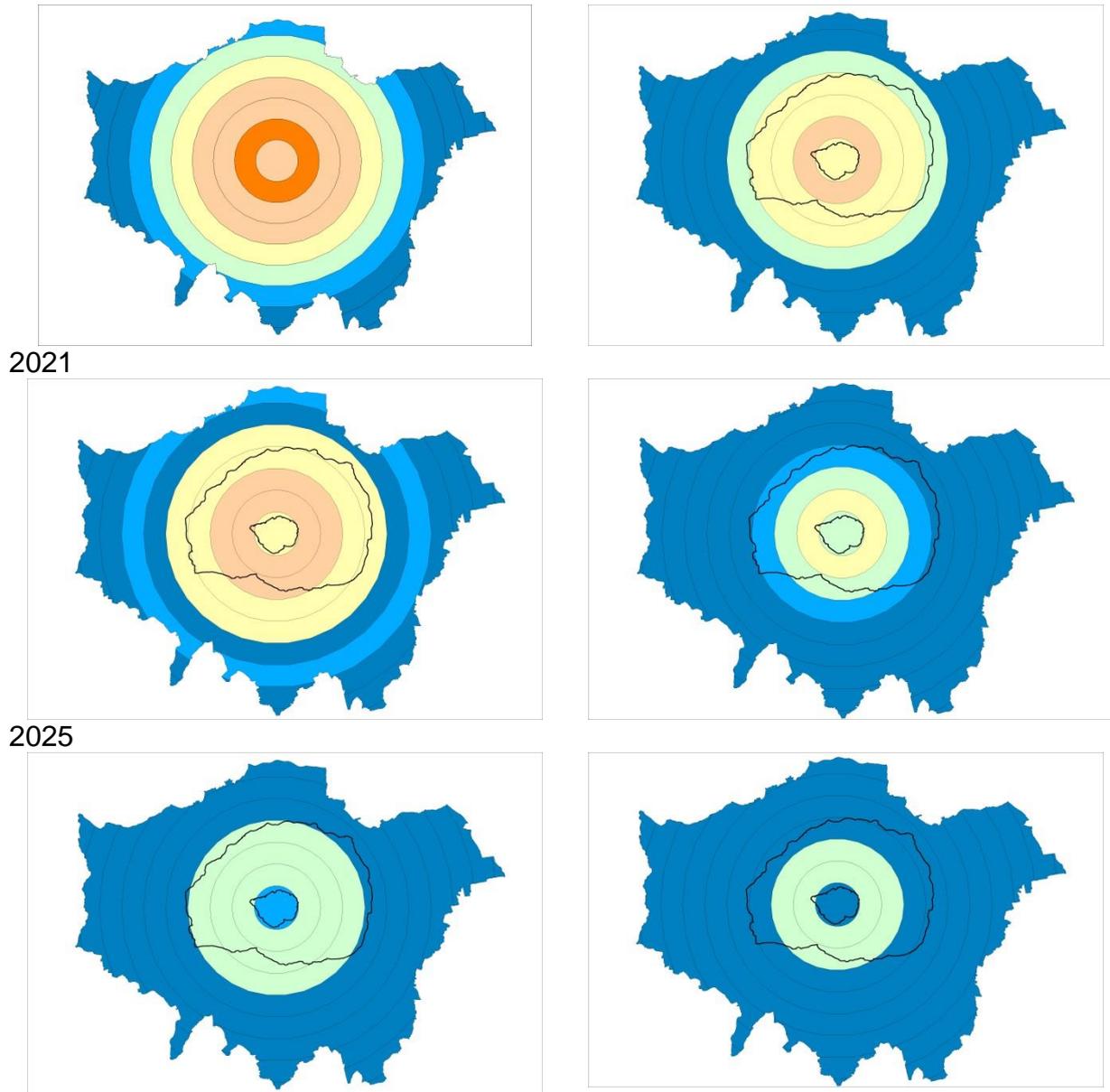


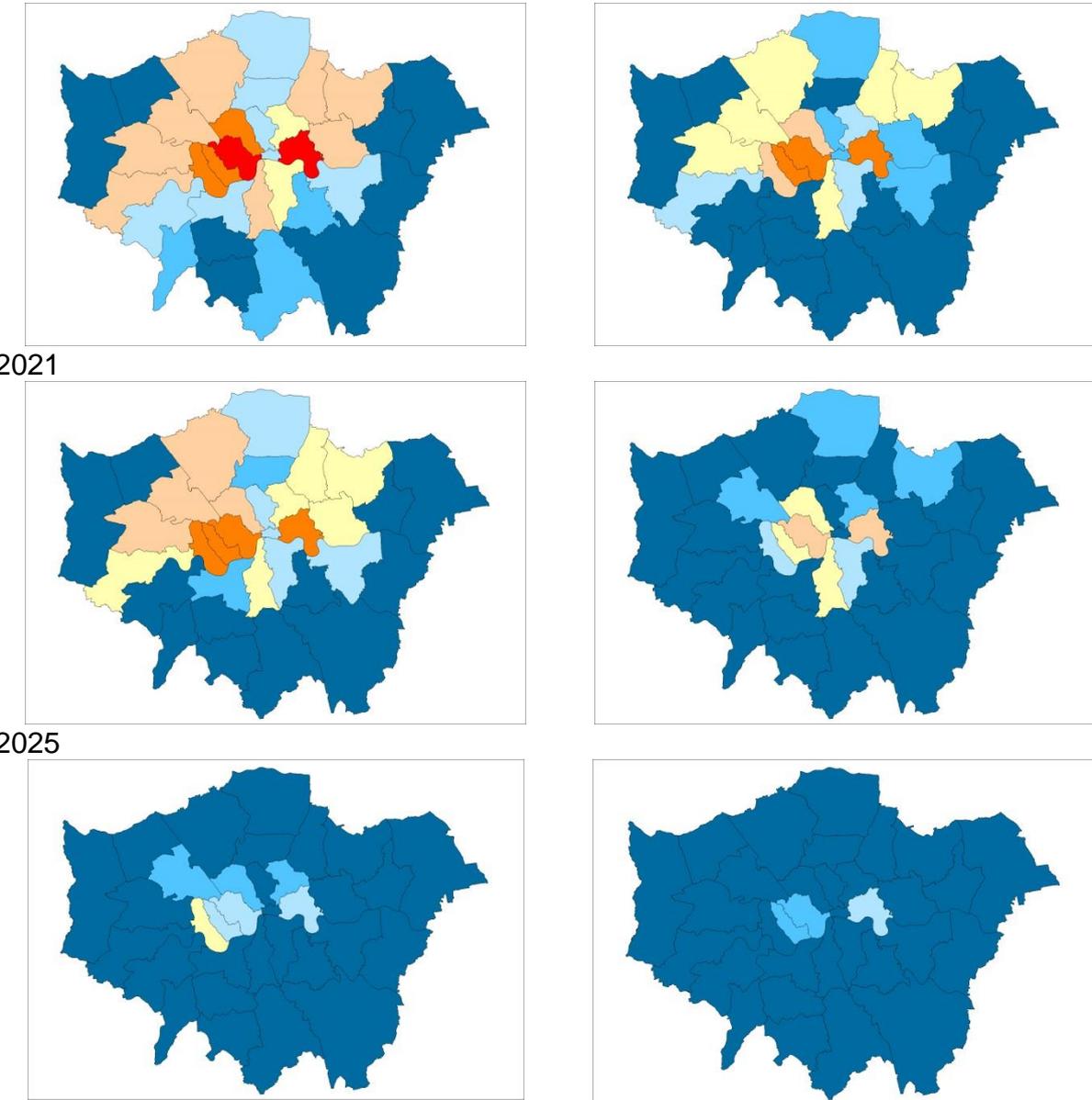
Figure 47: Impact of proposals on population living in areas of exceedence 2020-2025 by borough

Baseline
2020

With Proposals

2021

2025



Population Exceeding NO2 Limit Values
Based on Output Area Average Concentrations

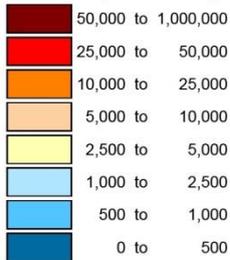
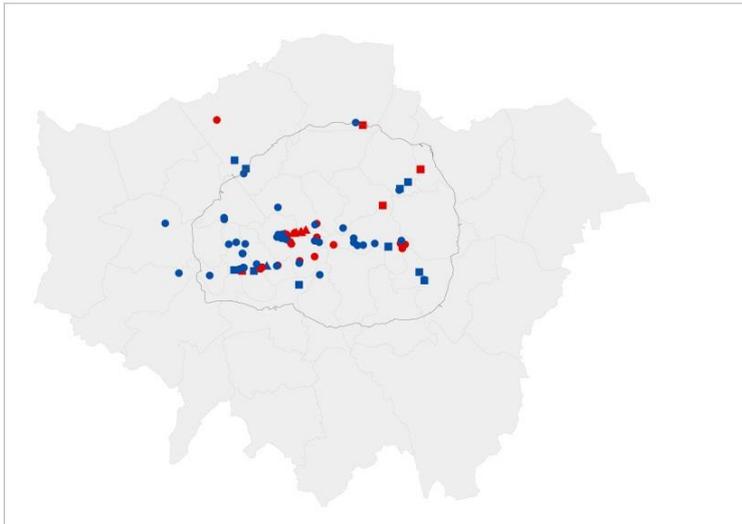


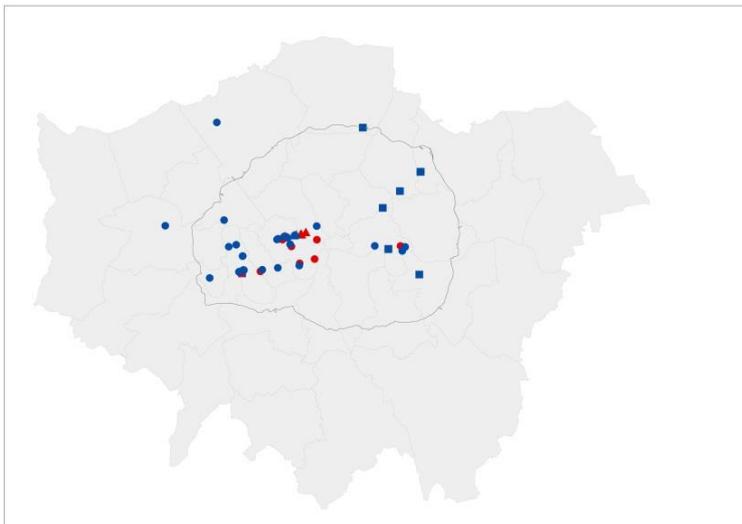
Figure 48: Change in schools, hospitals and care homes in areas exceeding legal limits
2020



Legend

- Expanded ULEZ boundary
- School no longer exceeding limit
- School exceeding limit
- ▲ Hospital no longer exceeding limit
- ▲ Hospital exceeding limit
- Care home no longer exceeding limit
- Care home exceeding limit

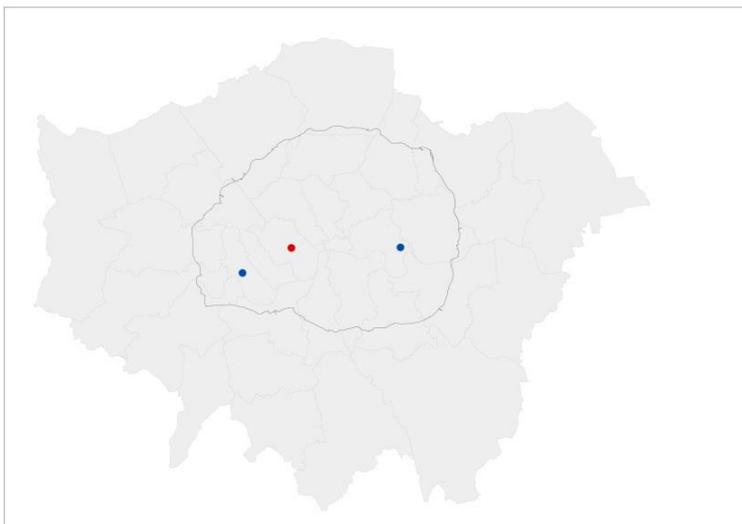
2021



Legend

- Expanded ULEZ boundary
- School no longer exceeding limit
- School exceeding limit
- ▲ Hospital no longer exceeding limit
- ▲ Hospital exceeding limit
- Care home no longer exceeding limit
- Care home exceeding limit

2025



Legend

- Expanded ULEZ boundary
- School no longer exceeding limit
- School exceeding limit

Appendix F

Low Emissions Vehicle Charging strategy 2018-2022

LOW EMISSION VEHICLE CHARGING STRATEGY 2018-2022

Document reference: Draft to Client

Date: April 2018

Created by Avisha Patel



Lewisham

PROJECT
CENTRE

EXECUTIVE SUMMARY

Vision: To ensure that all of Lewisham's residents, businesses and visitors are within 500m of a charging point by 2020, with a range of options available that remain fit for purpose and encourage further uptake of low emission vehicles.

Improving local air quality by reducing emissions from road traffic is a priority for Lewisham. Providing an accessible network of electric vehicle charging points will play a vital role in facilitating the uptake of electric vehicles, which is a necessity to deliver air quality improvements and achieve the Mayor of London's target for a zero emission transport network by 2050.

Electric vehicle ownership in Lewisham is forecast to rise rapidly in the next eight years with an estimated 1,398 plus electric vehicles registered to Lewisham residents and businesses by 2025 (*TfL ULEV Delivery Plan*). This represents a huge rise in ownership levels in the borough from just 129 electric vehicles registered at the start of 2017.

This strategy assesses the main challenges that Lewisham face to achieve including outlining the existing charging offer that exists throughout Lewisham.

A range of electric vehicle charging infrastructure will be required to meet the varied needs of residents and commercial electric vehicle users. These will be located in appropriate locations in residential streets, car parks and popular destinations such as high streets, shopping and leisure centres.

The four key objectives of this strategy are to:

- Support the following types of charging through provision of appropriate infrastructure in the right locations:
 - Charging points in residential areas
 - Charging points in town centres, workplaces and at other key destinations
 - Charging points for car club vehicles
 - Charging points for freight and servicing vehicles
 - Charging points for taxis
- Ensure that provision and maintenance of electric vehicle charging points (EVCPs) becomes cost neutral through the pursuit of infrastructure funding opportunities and income from the charging points;
- Ensure the charging network remains fit for purpose, can cater for future expansion and is adaptable to emerging technologies;
- Encourage the uptake of electric vehicles through supporting policy frameworks, initiatives, and public engagement exercises, drawing on best practise from around the UK and beyond.

This document will assist Lewisham by setting out how it will consider expansion in the future by identifying the most suitable locations and types of charging infrastructure required to encourage electric vehicle uptake and meet growing demand for charging facilities across the borough.

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GLOSSARY

- AQMA;** Air Quality Management Area - An area in which each local authority measures air pollution and tries to predict how it will change over the next few years. If a local authority finds any places where UK pollution objectives are not likely to be achieved, it must declare an Air Quality Management Area there.
- CIL;** Community Infrastructure Levy - Planning charge, introduced by the Planning Act 2008 as a tool for local authorities in England and Wales to help deliver infrastructure to support the development of their area.
- CO₂;** Carbon Dioxide - Pollution mostly as a result of the burning of fossil fuels
- EVCPS;** Electric vehicle charging points
- EU;** European Union
- GULCS;** Go Ultra Low City Scheme
- LEZ;** Low Emission Zone
- MTS;** Mayor's Transport Strategy
- NO_x;** Nitrogen Oxide - When nitrogen is released during fuel combustion, it combines with oxygen atoms to create nitric oxide (NO). This further combines with oxygen to create nitrogen dioxide (NO₂). Nitrogen dioxide and nitric oxide are referred to together as oxides of nitrogen (NO_x).
- NO₂;** Nitrogen Dioxide
- OLEV;** Office for Low Emission Vehicles
- PHV;** Private Hire Vehicle
- PM;** Particulate Matter - also known as particle pollution, is a complex mixture of extremely small particles and liquid droplets that get into the air. Once inhaled, these particles can affect the heart and lungs and cause serious health effects
- RFID;** Radio-Frequency Identification - the use of radio waves to read and capture information stored on a tag attached to an object, such as a contactless payment card
- TfL;** Transport for London
- ULEV;** Ultra Low Emission Vehicle
- ULEZ;** Ultra Low Emission Zone
- ZEC;** Zero Emission Capable

1. CHAPTER ONE

Policy Context

Air quality has become a priority in recent years as the UK struggles to meet its legal obligations to control levels of pollutants in the air.

CO₂ Emissions

The Climate Change Act 2008 – This Act saw the UK tasked with reducing emissions by at least 80% by 2050, with London being set a target to reduce annual emissions of CO₂ by 60% in the same time frame. The responsibility was placed on all sectors; however the Mayor's Climate Change Mitigation and Energy Strategy (CCMES) suggested the transport sector should contribute to the wider target by making a 48% reduction in transport CO₂ emissions. Considering that the population is expected to increase within London, these tasks will be particularly challenging.

Nitrogen Oxide and Particulate Matter

Road transport is responsible for nearly half of both NO_x and PM emissions across greater and central London, with diesel engines causing around 40% of NO_x emission across the whole city. London still does not meet the legal EU limits for NO₂ and it is argued that following the current policy, the legal NO₂ limit will not be reached until at least 2025.

Future Estimates of London's Air Quality

London is seeing its position in liveability rankings dropping behind cities like Berlin and Paris, who are taking advanced action to minimise air pollution and congestion.

It is estimated that by 2020, air quality will have improved as a consequence of the emphasis being placed on technological advances in vehicle design, together with policies and legislation geared at reducing emissions across London and the EU.

Impact on Health

In 2010, short-term exposure to both pollutants in London was associated with 1,990 hospital admissions for respiratory problems resulting from PM_{2.5}, and 420 from NO₂. 740 admissions were for cardiovascular ailments associated with PM_{2.5}. It is estimated that all these health effects imposed an economic cost of between £1.4 billion and £3.7 billion.

For long term exposure, researchers from King's College London found the number of premature deaths in London associated with PM_{2.5} in 2010 was 3,537, while the number of deaths associated with NO₂ was believed to be 5,879 – creating a total of 9,416 premature deaths attributed to local air pollution.

"The Government has set out to ban sale of all diesel and petrol cars and vans from 2040"

- Department for Transport, 2017

Mayors Transport Strategy (MTS3)

The Mayor's aims are for all taxis and Private Hire Vehicles (PHVs) to be zero emission capable by 2033, for all buses to be zero emission by 2037, and for London's entire transport system and all new road vehicles driven in London to be zero emission by 2040.

Three key themes are at the heart of this strategy:

A Good Public Transport Experience

Public transport is the most efficient way for people to travel over distances that are too long to walk or cycle, and a shift from private car to public transport could dramatically reduce the number of vehicles on London's streets.

New Homes and Jobs

More people than ever want to live and work in London. Planning the city around walking, cycling and public transport use will unlock growth in new areas and ensure that London grows in a way that benefits everyone.

Healthy Streets and Healthy People

Creating streets and street networks that encourage walking, cycling and public transport use will reduce car dependency and the health problems it creates.

Healthy Streets Concept



The MTS introduces the concept of healthy streets and suggests that streets make up 80% of the city's public space.

There are 10 components of the healthy streets agenda, two of which directly relate to electric vehicles; improving air quality and reducing traffic noise. Electric vehicles would contribute to achieving both of these goals within Lewisham and across the city.

The Healthy Streets Approach provides a structure for placing human health and experience at the centre of planning the city and recognises improving air quality benefits everyone and reduces unfair health inequalities.

Expected Outcomes

The strategy outlines 9 expected outcomes; three of which relate to increased uptake of electric vehicles:

- London's streets will be healthy and more Londoners will travel actively
- London's streets will be clean and green
- Active, efficient and sustainable travel will be the best option in new developments

Considering charging facilities during the planning stage

The London Plan

The London Plan states that all new developments must provide 20% active provision of parking spaces with electric vehicle chargers and an additional 40% of passive spaces which have the cabling prepared so that chargers can be added when demand increases in the future. Installing passive ducts and cabling greatly reduces the time, cost and disruption of installing additional bays in the future.

Activation is left to the discretion of the landowner except in the case where a travel plan is in place. In this case, the levels of usage should be monitored and new electric vehicle charging points installed when the supply is exceeded.

A draft new London Plan was published for consultation in December 2017, with a final London Plan due to be adopted by late 2019. There will be a need to ensure that any changes in the London Plan are reflected in Lewisham's approach. The current proposal is for all operational parking to provide infrastructure for electric vehicles/ULEVS. Residential developments should provide 20% active provision, with the remainder passive.

TfL Electric Vehicle Charging Infrastructure Location Guidance for London

This document was published in 2017 and provides an evidence based guidance to help boroughs and operators identify where best to locate charging infrastructure, to meet the current and future needs of electric vehicle users across London. The content of the guidance focuses on 4 themes:

- Identification of current demand
- Provision for future uptake
- Installing appropriate charge points in the right locations to ensure the type of charging point installed reflects the needs of the user
- A good geographical spread of charging networks

The guidance focuses on the specific needs of London's key electric vehicle user groups, including residents and visitors without off-street parking, deliveries, local businesses and electric Car Club fleets.

LEZ

The LEZ operates across the whole of Greater London and came into fruition from January 2012, when a charge was levied on the most polluting vehicles. These vehicles included lorries, buses and coaches below the Euro 4 emissions standard, and vans, minibuses and ambulances below Euro 3 standards.

The charge applies 24 hours a day, all year round. Cameras with number plate recognition allow fines to be issued to eligible vehicles not paying the charge.

ULEZ

The ULEZ policy is due to come into force in 2019 and will cover London's current congestion zone area. Vehicles failing to meet the Euro 6 emissions standard for diesel, and Euro 4 for petrol (Euro 3 for motorcycles), will levy a charge.

- £12.50 for cars, vans and motorcycles
- £100 for HGVs, buses and coaches

Fines will be imposed on eligible vehicles not paying the charge. By 2018, all newly registered taxis will be required to meet the same standards, with buses complying by 2020. From 2021, the zone will be extended and be bound by the North and South Circular roads; so for central London from 8 April 2019, and then for Inner London from 25 October 2021, all vehicles (light and heavy) will be subject to relevant ULEZ standards and charges.

An expansion in the ULEZ area covering light and heavy vehicles to Inner London in October 2021, together with the changes to the LEZ to require Euro VI London wide for heavy vehicles after October 2020, will result in significant reduction in NOx emissions; this means more Londoners experiencing the health benefits of improved air quality. As a result, in 2020, it is expected there would be a 20% reduction in NOx from road transport London-wide. In 2021, it is expected there would be a 31% reduction in road transport NOx in inner London and 28% in outer London. All roads in London are expected to see a decrease in road transport NOx emissions as a result of the proposals.

As a result of these emissions reductions, there would be over 100,000 fewer people in London living in areas exceeding legal limits for NO₂ concentrations in 2021, a reduction of 77%.

Lewisham has a key role to play in contributing to these projected figures; the borough will have to plan for the electrification of cars, taxis, buses and freight.

Lewisham's Local Implementation Plan (LIP) 2011-2031

Lewisham's LIP document was published in April 2011 and outlines goals and objectives for the council to meet. With focus on the Mayor's Transport Strategy, the LIP places importance on creating a 'low emissions transport system' and more 'sustainable modes of travel' to tackle transport emissions. Whilst the Council's policies seek to encourage people to walk, cycle or use public transport where possible, it is recognised that this is not always possible for every journey. With this in mind, Lewisham recognises the need to promote the use of electric vehicles and expand the existing network.

It will be essential now that the Mayor's Transport Strategy 2018 is finalised to develop the next LIP (2019-2041) to reflect the council's priorities. The LIP3 will support the implementation of electric vehicle charging points. A draft LIP will be consulted on in Autumn 2018, with a final version submitted to TfL and approved by March 2019.

In 2017, London breached its annual air pollution limit within 5 days of the New Year

- London Councils

"Lewisham support the uptake of Low Emission Vehicles and will aid the further expansion of charging infrastructure throughout the borough"

- London Borough of Lewisham
Air Quality Action Plan

2. CHAPTER TWO

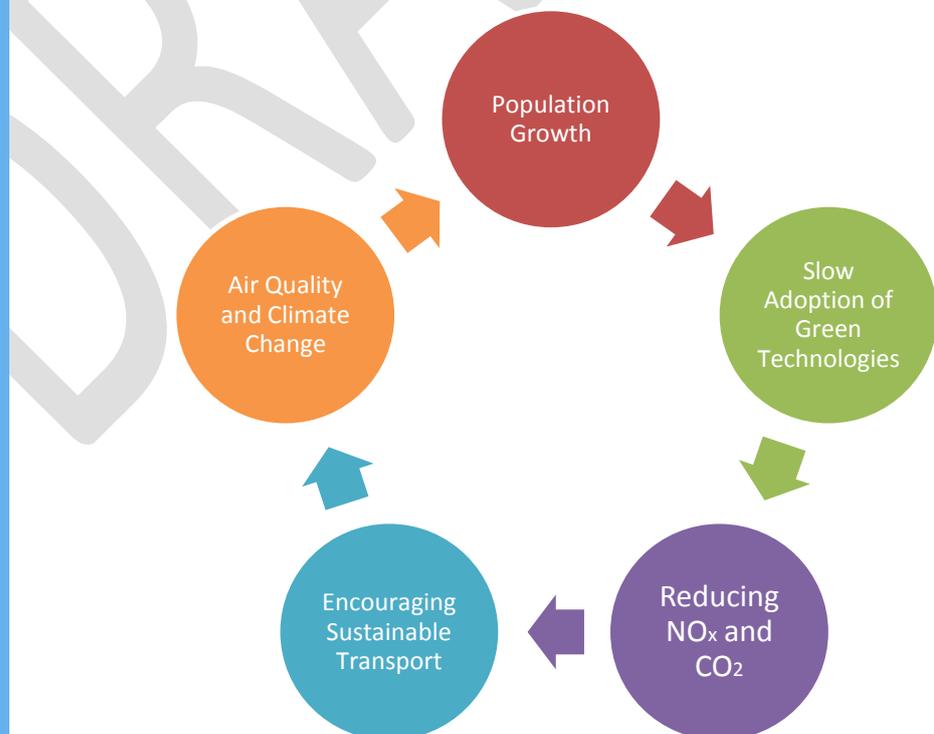
Lewisham Context

Lewisham acknowledges that the increased uptake of electric vehicles is only part of the solution to improve air quality and needs to consider others avenues that will support the objectives of this strategy.

Lewisham's Air Quality Action Plan for 2016-2021 confirms that the borough is failing to meet the Nitrogen Dioxide EU annual average limit in some of the Air Quality Management Areas. Although the borough is meeting the EU limits for Particulate Matter, they are exceeding air quality guidelines from the World Health Organisation, for this particular pollutant.

Lewisham is currently undergoing significant regeneration, particularly around Catford, Deptford and New Cross and Lewisham Town Centre, with residential, commercial, utilities and transport network improvements; the reduction of emissions from road traffic is a priority of these changes.

Lewisham's key challenges



“Lewisham is changing, with major development and regeneration to support economic growth and London’s increasing population.”

- *Lewisham Local Implementation Plan 2011-2031*

Population and Growth

Figures from the Office for National Statistics show the population of London increased by 5.7% between mid-2011 and mid-2015, compared with growth of 2.9% for the UK as a whole. London’s population is anticipated to grow from around 8.2 million to over 10.5 million by 2041, which will only emphasise the increasing demand for travel.

Over the last decade or so, we have witnessed an ever increasing emphasis being placed on the need for sustainable transport; a modal shift which appears to have had a positive impact. According to the Greater London Authority, public and active transport now accounts for 64% of all one-way commuter movements in London.

Having said this, there is still a long way to go in ensuring that goods and people flow freely through our capital without exacerbating air quality and its associated impacts. 33% of journeys are still made by private transport (ULEV Delivery Plan, 2015).

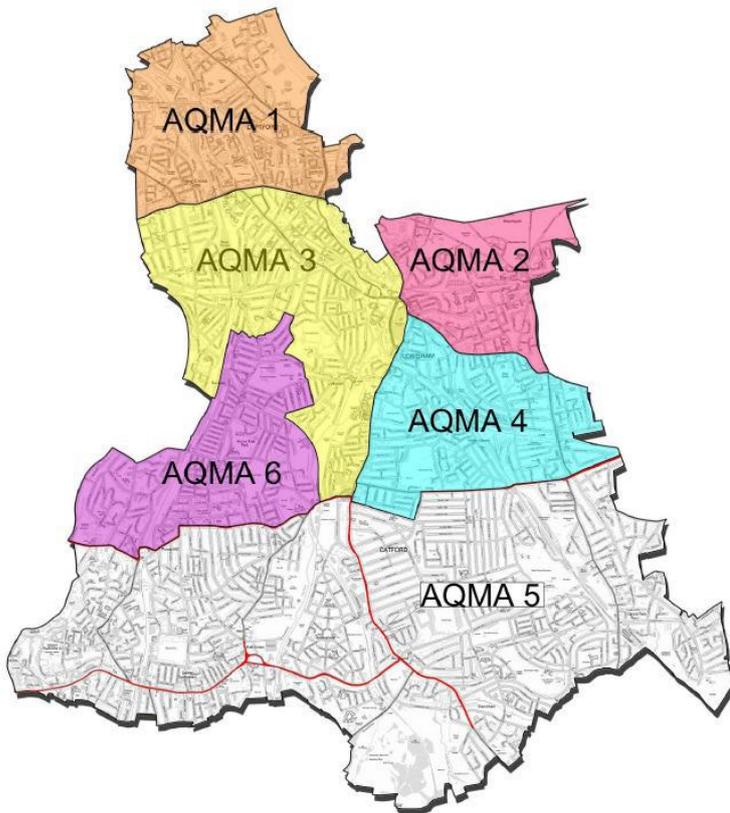
Environmental Challenges

Air Quality and Climate Change

Lewisham’s Mayor and Cabinet in July 2017 approved details of an air quality campaign which aims to galvanise borough-wide action to address air quality issues in Lewisham. It seeks to both reduce emissions to improve air quality, and reduce exposure to poor air quality. To achieve this, the campaign states it will:

Show the Council as a best-practice example to inspire other organisations to take action, which includes provision of electric vehicle charging points. As part of the campaign one of the five air quality pledges we’re asking residents to sign up to commits to ‘Make your next car an electric or a hybrid’.

The Council has also launched the Lewisham Air App, which allows users to receive news and alerts about air quality, check the air quality in the borough and plan low-pollution walking and cycling routes using a specially-designed map. To get the app visit Google Play or the Apple App store and Search for 'Lewisham Air App'.



The Air Quality Management Areas for the Borough of Lewisham declared on 01/07/2001 consist of four large AQMAs, which cover the area to the north of the South Circular and a series of ribbon roads, which comprises AQMA5. Since this date, a subsequent 6th AQMA 'Crofton Park and Honor Oak Park Air Quality Management Area' was declared on 10 April 2013.

These areas seek to tackle problem areas where air quality regularly exceeds statutory limits. Electric vehicles offer a solution to this problem as they operate with no tail pipe emissions and road transport is a key contributor to air pollution. The introduction of electric vehicle charging points in the AQMAs will support Lewisham's aim of improving air quality.

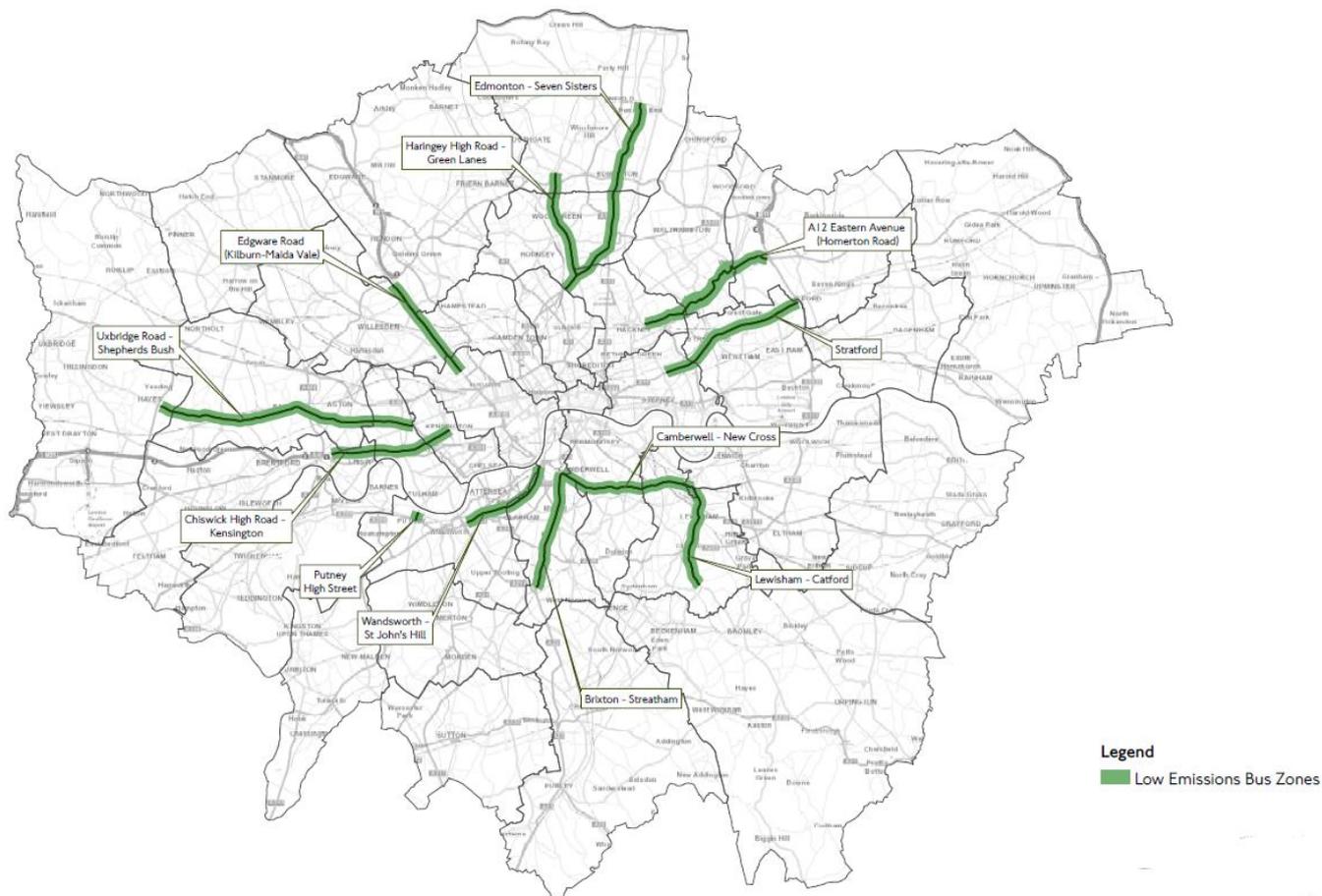
Low Emission Bus Zone

In addition to the advances in electric vehicle charging infrastructure, a low emission bus zone is being introduced from Lewisham to Catford (from Bromley Road, along Lewisham High Street to Lewisham Road). The Mayor has announced 10 new low emission bus zones, which will see the deployment of clean buses across the capital's most polluted routes, as shown on the map overleaf.

The new greener buses, which will be a combination of hybrid and clean buses that meet Euro VI standards, are part of an improvement programme to 3,000 buses outside central London.

The zones are expected to reduce NO_x emissions from buses along the routes by around 84% and will fulfil the Mayor's manifesto commitment to introduce Low Emission Bus Zones by 2020. One of the fundamental benefits of these zones will be the thousands of school children breathing cleaner air (there are 172 schools located within 100 metres of the new zones).

Low Emission Bus Corridor Map

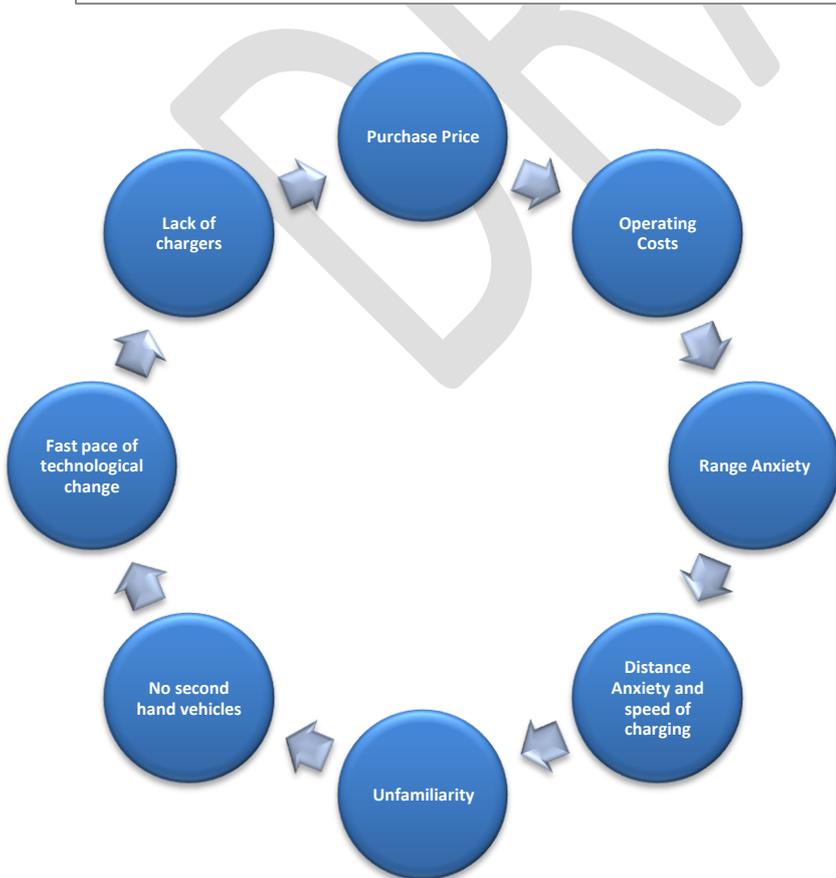
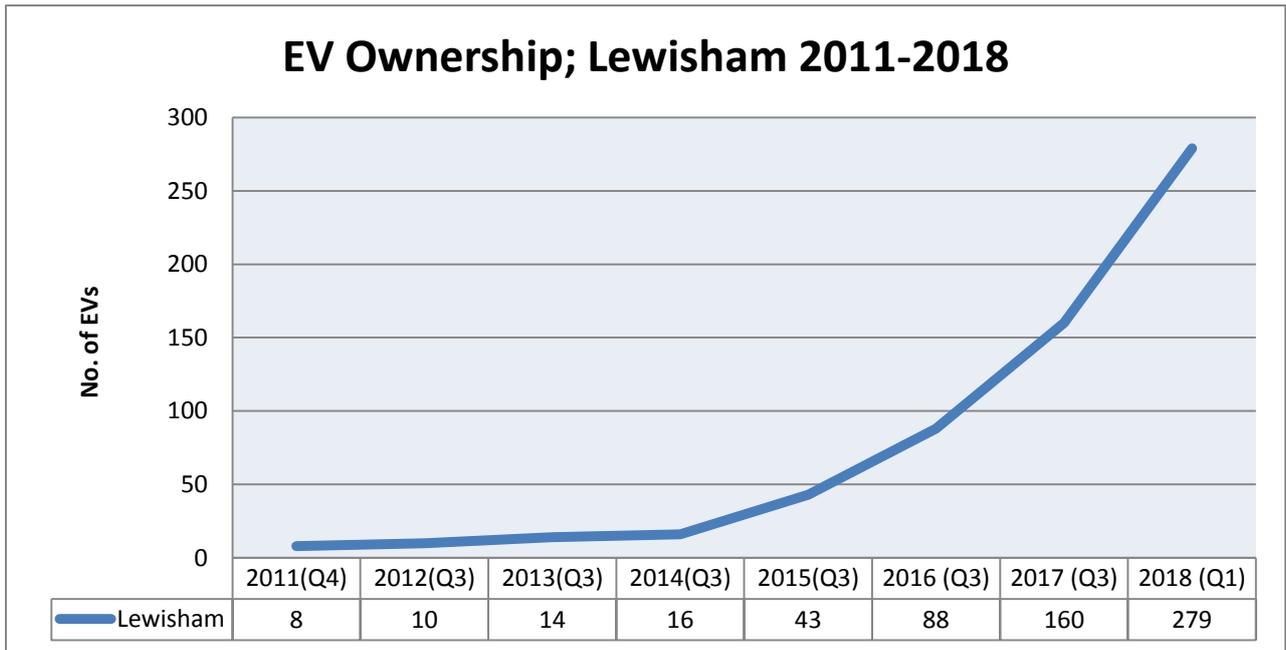


Lewisham Electric Vehicle Ownership; Current

Lewisham acknowledges that general vehicle ownership is decreasing in the borough, and indeed much of London, as more people choose to walk, cycle, use public transport and car clubs, as an alternative to car ownership. However, this strategy recognises that some people still choose to own and travel by car for at least some of their journeys. The ownership data overleaf highlights that electric vehicle ownership is rising; businesses are also increasingly considering electric vehicle options for their fleets. It is therefore essential that the Council provides the necessary on-street infrastructure to facilitate this transition.

	2011(Q4)	2012(Q3)	2013(Q3)	2014(Q3)	2015(Q3)	2016 (Q3)	2017 (Q3)	2018 (Q1)
Lewisham	8	10	14	16	43	88	160	279
London	895	979	1,270	2,259	4,422	7,255	11,977	18,597
UK	2,440	4,256	7,614	17,610	42,761	77,363	118,342	157,304

The table above shows the number of plug-in vehicles licensed at the end of the quarter in the UK, from 2011 to 2017 and at the end of Q1 of 2018. Of the 18,597 vehicles registered in London (Q1 of 2018), only 1.5% (279 vehicles) are from within Lewisham.



Although electric vehicle ownership appears to be increasing, Lewisham are aware of barriers potentially preventing residents and business owners from transitioning from the conventional fuel vehicles. These barriers and concerns are expected to be overcome in time, for instance, as the second hand vehicle market for electric vehicles takes off, electric vehicles will be more affordable for all.

At the end of Quarter 3 of 2017, there were 160 registered EVs within Lewisham

There are 10 existing charging point locations in the borough, and a further 16 locations ready to be programmed, which are both on and off-street

There are 21,000 registered diesel cars in Lewisham. Changing the minds of just 1% will more than double the amount of current EV owners

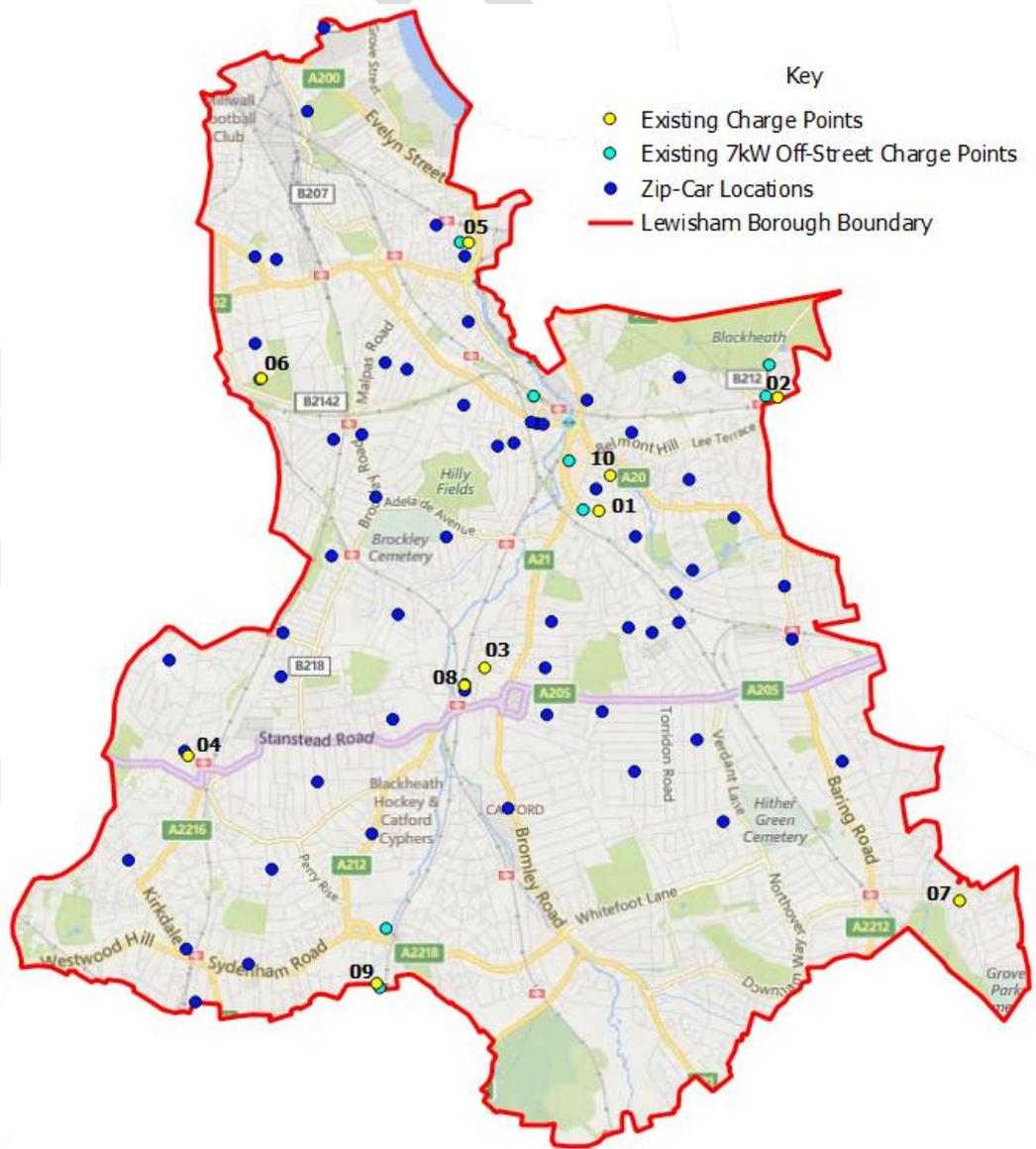
255 taxi drivers live in the borough (additional 107 registered to companies) and could make use of rapid charging points

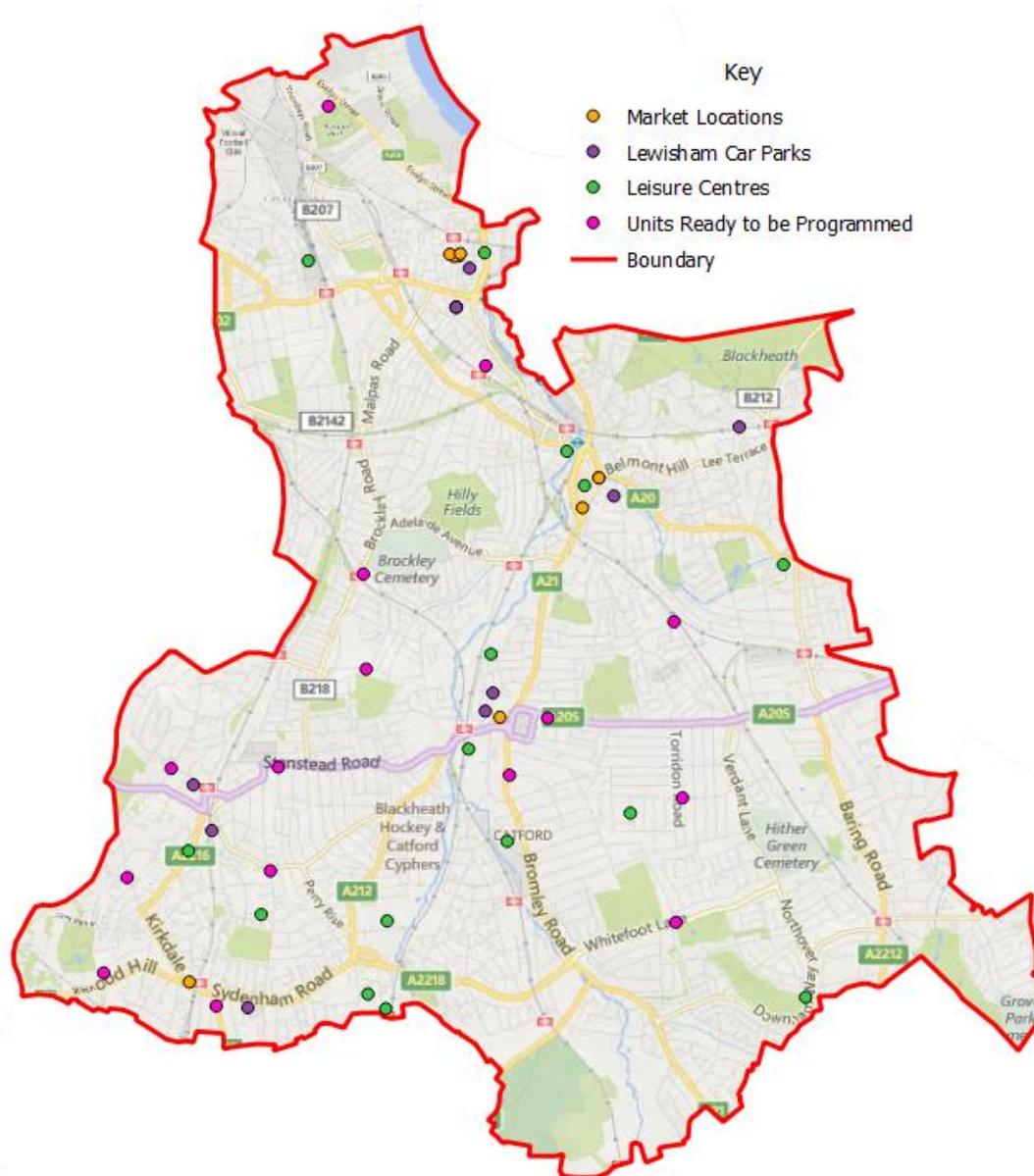
Currently 0.14% (160) of vehicles registered in the borough are electric, placing Lewisham 30th out of 33 boroughs in London

Existing Charge Points; Lewisham Map

The map pinpoints 'completed' charge point locations, existing off-street 7kW charging points and also highlights the 50 locations (Blue Dots) at which Zip-Car have car club bays within the borough (the numbers correspond to Table 2 in the Appendix).

If the evident increase in ownership is anything to go by, Lewisham's increasing uptake of electric vehicles will create more demand for charging points. The borough should endeavour to support the rapidly increasing use of electric vehicles by providing a greater number of reliable and user friendly charging points across the borough.





The map above highlights key locations across the borough, all of which are high visibility and high footfall areas especially around the town centres. Also displayed are locations where electric vehicle charging points are ready to be programmed. Lewisham intend on serving drivers visiting these high footfall areas by ensuring charging infrastructure is in place. Eventually, the objective is to create a network, spread relatively evenly across the borough.

If you would like more information or to register a request, please visit our website; www.lewisham.gov.uk/electricvehicles

3. CHAPTER THREE

Charging networks

Rapid (50kw) 30-40 min	Standard (7-22kw) 3-4 hours	Trickle (3kw) 7-8 hours
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There are a variety of charge points that may be introduced to meet the different needs of electric vehicle users. Lewisham is at a relatively early stage in the adoption of electric vehicles and it will be particularly important that a network of public chargers are introduced to help drive uptake. Those considering whether to convert from traditional vehicles to ULEVs are often concerned with 'range anxiety' and having public chargers visibly installed on-street helps to dispel this fear.

When considering the expansion of a charging network, thought must be given to the potential reduction of on-street parking bays to accommodate charging points.

Trickle or Residential 3-7kW (7-8 hour charging time)

This type of charging draws charge from existing infrastructure and is not currently offered in Lewisham.

Why?

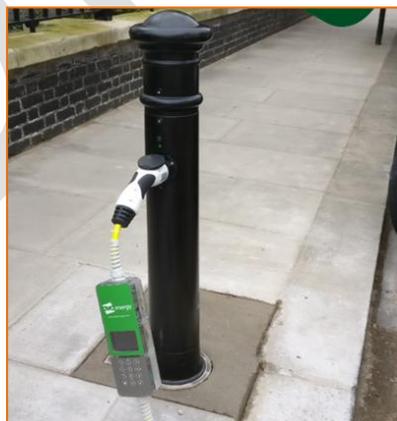
Lewisham acknowledges that there is a need to consider a suite of charging offers to meet the needs of Lewisham residents. The majority of charging occurs at home, in residential areas. In order to support the uptake of electric vehicles amongst these residents in Lewisham, it is important that on-street chargers are installed. Lamp post chargers are a different approach to the majority of the existing car chargers. Primarily, they are intended to address the challenge of charging electric vehicles when owners do not have access to off-street parking and haven't been able to secure a standard floor mounted charge point, perhaps due to limited footway widths.

Lamp column chargers could be installed in clusters, increasing accessibility to points and meaning that the adjacent spaces do not necessarily have to be dedicated to electric vehicle users only.

How do they work?

Lamp post chargers tap into the existing power network created for street lighting and are either integrated into the lamp column or are attached to it; making them a less expensive alternative to floor-mounted units. As they piggyback on an existing power grid, they are limited in the power they can supply but are sufficient for overnight charging.

For lamp posts that are at the back of the footway, bollards could be placed at the front of the footway with the power being drawn from an adjacent lamp post, as seen below. However, this adds additional clutter to the street environment.



Site Criteria & General Principles for Lewisham to Consider

Civils/Network Capacity

One of the advantages of lamp column charging is that they can be retrofitted or alternatively, chargers may be attached using a 'backpack' style. Regardless, the chargers will use the existing power supply.

Street Furniture

Lamp column charging units do not require an electricity feeder post as they are installed in or on existing lamp columns. As a result, the street scene is not affected. The lamp columns need to be located at the front of footway, unless separate bollards are used as shown on the previous page.

Accessibility

Lamp column chargers are designed for residential use, so accessibility is vital. Units should be installed in clusters to ensure the facilities can match demand.

Road Space

Sites should avoid blocking any junctions and ensure passing traffic can navigate the road as normal.

On/Off-Street

Lamp column chargers are designed to facilitate those who have no access to off-street parking. Therefore, units will be on-street.

Distribution

A trial conducted in the London Borough of Hounslow deduced that lamp column chargers should be installed in clusters. For each request for a charger, Hounslow installs three chargers on the same street. The idea is that by oversupplying the chargers there is no longer a need for a dedicated EV charging bay. The benefit of this approach is that it removed the cost and time involved with TMOs and the advertising/appeals process. This also adheres to the active/passive provision as stipulated in the London Plan.

Safety/ Liability

Cables from charge points create a trip hazard. To minimise this small risk, lamp columns must be at the front of the footway. This reduces the length of cable and ultimately reduces the risk of tripping over it.

Concerns

- Lamp columns must be at front of footway and meet specific criteria
- Resident concerns over security of the smart cable, which holds all metering and billing information
- Passing charging cost back to the user
- Slower charging speeds
- Large numbers of units required

Additional Notes

- Lamp column chargers do not required marked bays or Traffic Management Orders
- Anybody can use the bays

Trickle Lamp Column Chargers

3kW (7-8 hours)



Standard 7-22kW

Why?

Standard 7kW-22kW chargers make up the vast majority of electric vehicle charging points in Lewisham and are most widely available across London and will cater for the vast majority of electric vehicle users. Lewisham will consider introducing a range of suppliers to create a mixed network, and to provide a wider range of options to electric vehicle drivers. Standard chargers can be installed in public and residential locations as either floor standing units or wall mounted units. A single unit will generally offer two sockets which allow vehicles in two adjacent bays to charge simultaneously. The key challenges are funding, loss of general parking and how to reserve bays just for residents.



“The use of new EVCPs will be closely monitored to determine levels of usage and the best locations for further charging facilities”

Civils/Network Capacity

An EV charge point requires a connection to the local power grid. To establish this connection, ducting and cabling will have to be laid. The DNO (Distribution Network Operator) must determine the amount of available capacity in the local grid which can be allocated to an EV charge point. Planning permission is required.

7-22kW



Street Furniture

These units must be accompanied by a bay marking and sign post/plate. Power for each charge point is fed from a feeder pillar which will need to be incorporated into the street-scape. Consider visual impact and consult design guidance.

Visibility/Accessibility

Chargers should be highly visible and accessible, installed in locations which are busy with a high footfall (desirable).

Road Space

Sites should not be too close to junctions or be in a position which could disrupt traffic flow. It's also important to consider whether introducing a charging point would reduce the amount of footway space to a point where the width is unacceptable. 1.8m of footway clearance is desirable.

On/Off-Street

These units may be installed on or off-street, though most floor-mounted trip destination chargers are located on-street where a TRO and consultation is required. On-street locations would be more visible. These chargers can however be installed in off-street car parking facilities and at retail, leisure, and commercial premises where visitors are likely to park.

Distribution

A study commissioned by TfL found that a key consideration for EV drivers when choosing an EV charge point was the proximity to their end destination. It is also of particular importance to attempt to install more than one EV charger at each location. Passive provision should be installed where possible to future proof sites against rising demand in the future. Consideration should also be given to the locations of existing chargers; analysing their data usage may provide insight into additional distribution and geographical spread. In areas where EV drivers may spend less time, 22kw units could be installed. In locations where users may spend more time, 7kw units would suffice.

Passive/Active Provision

It is best practice to install both passive and active provision. That is power supply for the chargers which will be immediately installed and cabling for additional chargers which may be installed in the future when demand increases.

Safety/ Liability

Cabling from charge points can create trip hazards. To minimise this small risk EV charge points should be designed to minimise the cable extension. TfL guidance recommends that bays and chargers should be laid out to achieve a maximum of a 45 degree angle on a cable in operation.

Concerns

- Enforcement of vehicles being plugged-in but not charging
- Current lack of interoperability
- Concerns over future upgrades to power infrastructure

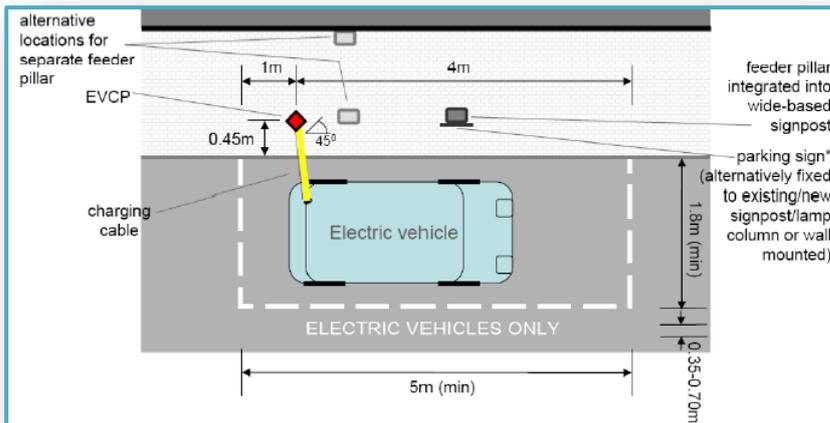


Design of Charge Point Locations

When designing or introducing charge points, there are fundamentals to consider both on and off-street to ensure sites are suitable.

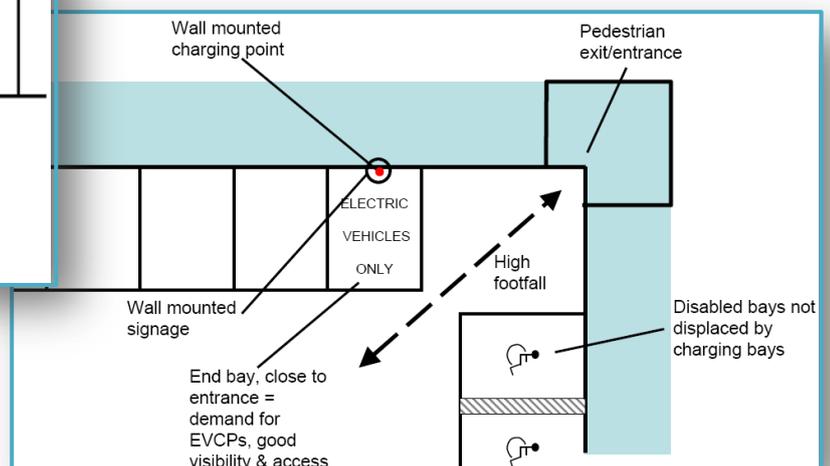
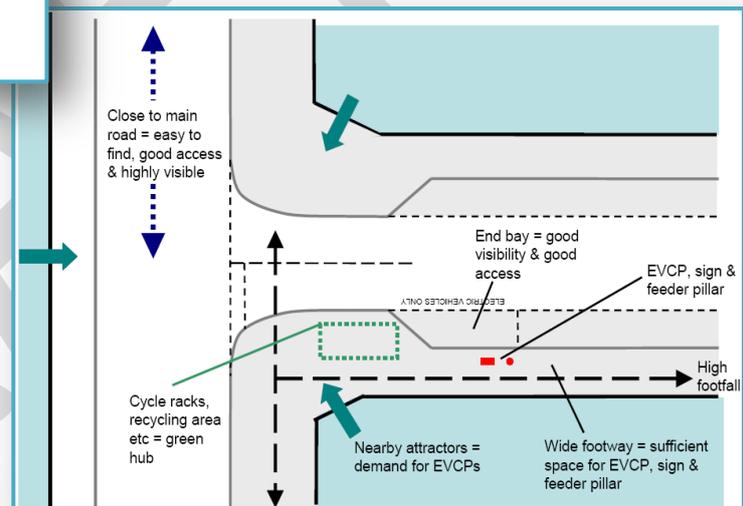
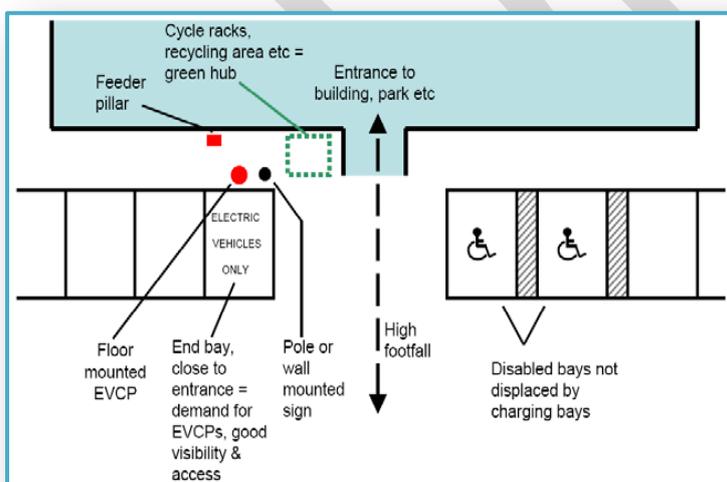
Lewisham will consider the impact on the street scene and loss of parking amenity before agreeing to any locations.

On-street



These criteria are for free-standing charging points.

Off-Street



These off-street criteria are also applicable for rapid charging units.

Rapid 50kW

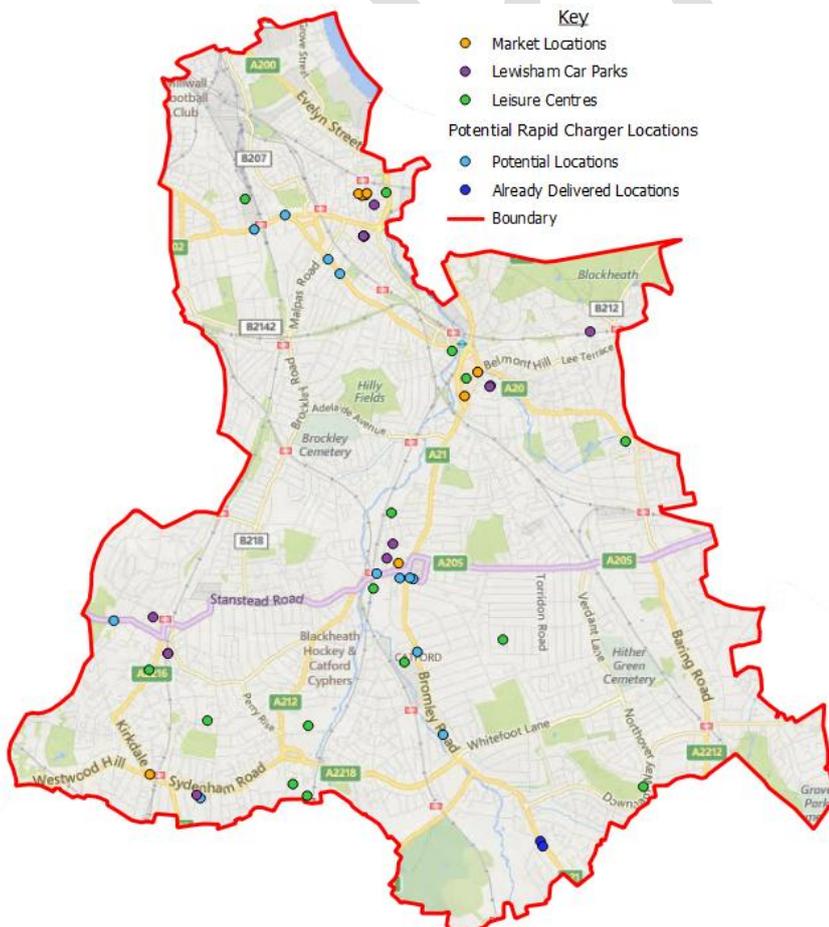
Why?

To meet the growing needs of different electric vehicle users, Lewisham is investigating the introduction of Rapid Charging points and working closely with Transport for London to achieve this.

Rapid chargers are capable of recharging a vehicle in minutes rather than hours. They are vital to long distance travel and for commercial vehicles such as taxis, which will need to top up during the day. The standard rapid charging speed is currently 50kW although Tesla currently offers an Ultra Fast 120kW with their proprietary 'Super Chargers'. Due to their greater power consumption, they require larger feeder pillars or a substation and often more extensive civils works. Consequently, car parks are generally the most ideal locations for rapids, due to the space required for the associated equipment.

TfL have publicised their rapid charge framework, offering the scheme to local authorities within London. They are proposing to identify locations across TfL, borough and private land which would be capable of hosting electric vehicle rapid charging infrastructure. Under the scheme, chosen locations would be tendered out to six charge point operators who will bid for a concession contract to install, operate and maintain rapid charge points at their own cost. TfL will fund the installation of the power infrastructure and associated street furniture.

How do they work?



Rapid chargers work in the same way as a standard floor mounted charger but charge at a more accelerated rate.

The map displays the two charge point locations already delivered by TfL and the potential additional locations across the borough. These are along strategic routes, leading traffic in to and out of Lewisham.



Civils/Network Capacity

The DNO (Distribution Network operator) must be contacted and permission obtained to connect to the grid . For TfL's rapid programme TfL will do this. They will indicate the power capacity available. Due to the large amounts of power which chargers draw they may mandate that upgrades are made to the infrastructure. This is of particular concern with rapid chargers. Upgrades to cables and transformers can become prohibitively expensive.

Street Furniture

Rapids require an electricity feeder post (See TfL guidance section). This is often housed in a separate cabinet to the charger and can reach the size of a substation if multiple units are installed in one location. There are two considerations - Whether there is sufficient space to locate the charger and the feeder post, and whether the street scene will be significantly impacted.

Visibility/Accessibility

Rapids are largely installed in off-street locations such as car parks and so need to be visible. Taxis and LGVs who wish to charge during the working day require rapid chargers, located on key arterial routes into London and close to taxi ranks.

Road Space

Due to the size of the rapids, build-outs can be created to avoid the unit needing to be placed on the footway, where footways are narrow. In a car park, this is less of an issue, as long as the feeder pillar/substation is accounted for.

On/Off-Street

The majority of existing rapid chargers are located in car parks/ other off-street locations. This is due to a number of reasons; dwell time, turn over, footfall and ease of installation. The legal process for creating a dedicated EV bay in a car park is much easier than on-street where a TRO and consultation is required.

Distribution

Rapids do not necessarily need to be installed in clusters; however rapid hubs could be considered but with hubs of four or more it may also be necessary to install a substation. Strategic hubs are being evaluated on arterial roads, owned and maintained by TfL, and on private land.

Safety/ Liability

Trailing cables from charge points create a trip hazard. To minimise this small risk EV charge points should be designed to minimise the cable extension. TfL guidance recommends that bays and chargers should be laid out to achieve a maximum of a 45 degree angle on a cable in operation.

Concerns

- Locations are harder to determine due to the size of the units
- If multiple units are installed, space for a substation is necessary
- Ensuring power grid has been upgraded to support the infrastructure



4. CHAPTER FOUR

Lewisham's Objectives

500m

To support the following types of charging through provision of appropriate infrastructure in the right locations:

- a) Charging points in residential areas
- b) Charging points in town centres, workplaces and at other key destinations
- c) Charging points for car club vehicles
- d) Charging points for freight and servicing vehicles
- e) Charging points for taxis

TfL research informs that 93% of electric vehicle users would use a fast charge point within a 5 minute walk of their vehicle and 73% would use a charge point if it were within 10 minutes walk; this equates to a distance of roughly 500m.

The average walking time to cover 500m is between 5 to 10 minutes (slow-fast walking)

£

To Ensure that provision and maintenance of electric vehicle charging points becomes cost neutral through the pursuit of infrastructure funding opportunities and income from the charging points

The provision of electric vehicle infrastructure should remain cost neutral wherever possible so as not become a financial burden on the council. To achieve this Lewisham should make use of all available funding and revenue. This includes government grants, partnerships with private companies which provide profit shares and fees, make use of planning powers (sect. 106 and CIL).

Making best use of assets - Parking facilities across the Council's housing estates are under-utilised. In total, Lewisham Homes manage over 18,000 residential properties. Lewisham have the opportunity to utilise redundant car parking spaces in their housing estates and may be able to generate an annual income.



To ensure the charging network is fit for purpose, can cater for future expansion and is adaptable to emerging technologies

When creating a charging network, the infrastructure must remain fit for purpose. By monitoring the usage data, the Council will be able to confirm that charging locations are appropriate and the units are being well utilised.

If electric vehicle uptake increases as predicted, the network must be able to cater for a higher volume of vehicles charging; charging points must be accessible and available.



To encourage the uptake of electric vehicles through supporting policy frameworks, initiatives and public engagement exercises, drawing on best practise from around the UK and beyond

Engagement events and vehicle trials are key to encouraging electric vehicle uptake and increasing familiarity.

In regard to policy frameworks, reviewing parking policies and Local Plan policy will ensure that standards are implemented.

Objective 1

To support the following types of charging through provision of appropriate infrastructure in the right locations:

- a) Charging points in residential areas
- b) Charging points in town centres, workplaces and at other key destinations
- c) Charging points for car club vehicles
- d) Charging points for freight and servicing vehicles
- e) Charging points for taxis

1a. Charging points in residential areas

Key actions:

- Install even spread of 7kW chargers throughout residential areas where there is sufficient footway space, focusing on achieving 500m coverage in the first instance (see page 37)
- Consider and prioritise requests from residents for new on-street charging points, delivering this through a mixture of lamp column chargers and 7kW chargers
- Deliver lamp column chargers in clusters or across whole street
- Work with Lewisham homes to identify locations for 7kW and lamp column chargers in the Council's housing estates
- Consider creating charging hubs co-located with other sustainable transport modes i.e. cycle parking and car club vehicles

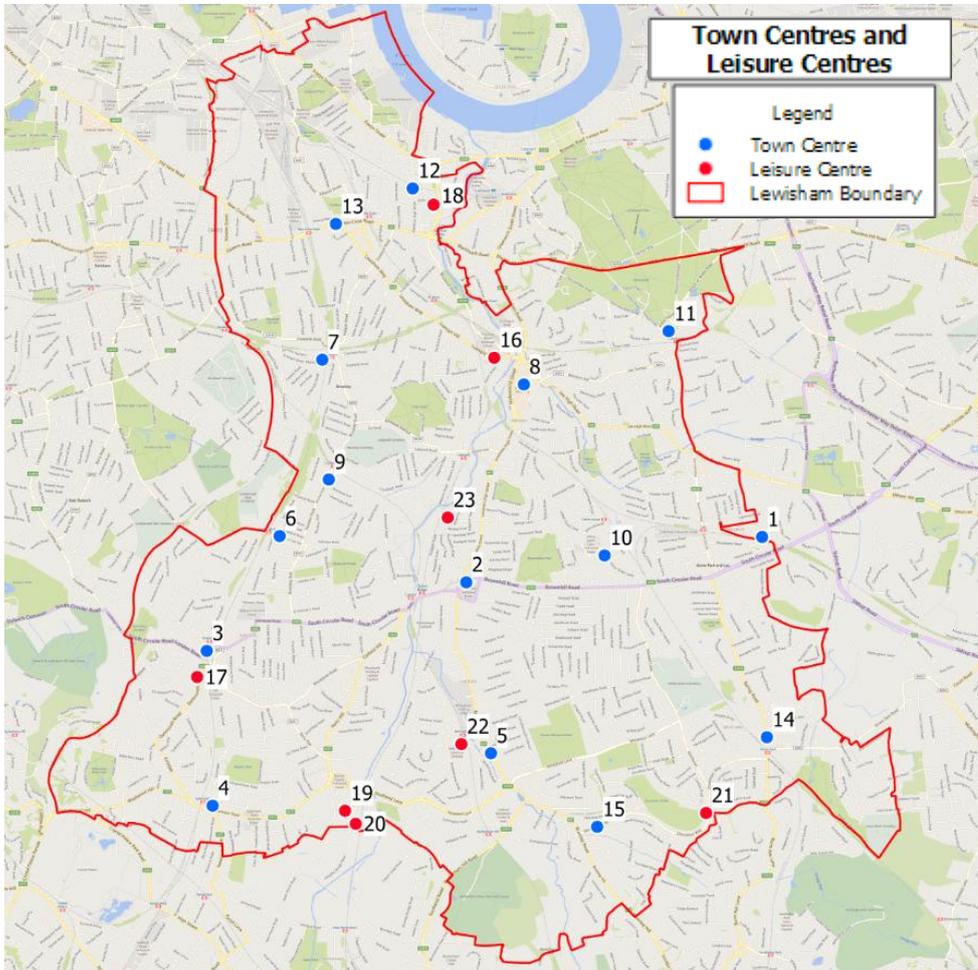
Expressions of interest are invited from those residing within Lewisham to ensure charge points are utilised and effective locations are selected. Residents may register their interest, find more information and propose locations for lamp column and standard 7kW charging points by visiting the following website: www.lewisham.gov.uk/electricvehicles

1b. Charging points in town centres, workplaces and at other key destinations

Key actions:

- Install 7-22kW chargers at key destinations, such as town centres, working with a range of operators
- Encourage supermarkets, leisure centres and workplaces to install charging provision in their car parks
- Contact petrol stations to ask that they consider installing rapid charging points
- Choose locations where chargers will generate a sufficient level of usage demand to ensure the unit becomes self financing
- Consider location of points along the low emission bus corridor

The map below pin-points leisure centre locations and town centres within Lewisham. Two of the leisure centres are in close proximity to the Low Emission Bus Zone route and as such, may be candidates for electric vehicle charging points if the site fits necessary criteria. Lewisham Indoor Bowls Centre already has two charging points, which appear to have become redundant.



ID	Name
1	Lee
2	Catford
3	Forest Hill
4	Sydenham
5	Bellingham
6	Honor Oak Park
7	Brockley
8	Lewisham
9	Crofton Park
10	Hither Green
11	Blackheath
12	Deptford
13	New Cross
14	Grove Park
15	Downham
16	Glass Mill Leisure Centre
17	Forest Hill Pools
18	Wavelengths Leisure Centre
19	The Bridge Leisure Centre
20	Lewisham Indoor Bowls Centre
21	Downham Leisure Centre
22	Bellingham Leisure Centre
23	Ladywell Arena

1c. Charging points for car club vehicles

Car Clubs and Car Club Operators

Car club services provide an alternative to a private car and require an accessible range of fast charging infrastructure to enable operators to introduce more ULEV vehicles into their fleets. This is with the intention that at least 50% of car operators fleets in London are ULEV's by 2025 (TfL target in the ULEV Delivery Plan for London). The expansion of electric car clubs will be an essential service to encourage lower car dependency, as population densities and demand for electric vehicle charge points increase from car owners.

Floating and point-to-point car club models will need access to charging networks. Zip-Car Flex already operates within Lewisham. Car club membership in Lewisham is growing, as people look for more cost effective and sustainable alternatives to car ownership. Lewisham currently has around 7000 car club members.

Key actions:

- Gradually install charge points in fixed car club bays, with 100% coverage by 2025
- Install an even spread of 7kW chargers across the borough, which point-to-point car club providers can also utilise
- Install EVCPs in any new fixed car club bay from the outset, with a requirement that the vehicle serving it is an electric vehicle
- Any new point-to-point provider permitted to operate in the borough should have at least 50% electric fleet, with a view of reaching 100% by 2025
- Create a new permit for car club vehicles through the parking policy review

1d. Charging points for freight and servicing vehicles

Key actions:

- Work in partnership with TfL to deliver a network of rapid chargers across the borough
- Encouraging businesses with off-street servicing/parking to install charging points and making them aware of suitable funding opportunities (See Objective 2)
- Exploring the possibility of installing charging points in loading bays
- Trial electric vehicle charging points for market traders

Market Trading; Socket networks

Lewisham manage street markets in the centre of Lewisham, Deptford, Catford and Sydenham. With this in mind, socket networks may be an additional option going forward acting as multi-purpose charging infrastructure.

Socket networks are plug sockets discretely installed in the footway. There are several variants including bollards, pop-up posts and flip top boxes.

They would offer slower 3kW speeds (like a standard 3-pin plug) but this would be sufficient for overnight trickle charging.

These ideas have not been widely trialled but they are seen as being a low cost solution to residential charging, once clusters of electric vehicles begin to form.

Consideration would have to be given on how best to manage access to these units, especially when market days are not in operation and in locations which may be pedestrianised. One solution is to use 'smart cables', such as those used with lamp column chargers. The user would purchase a cable at a cost of £200 and the metering technology within it would allow the Distribution Network Operator to bill the user for the



energy consumed. A simpler solution would be to provide keys, in a similar way to CPZ permits.

There is potential for creating trip hazards and this would have to be considered. However, these units are widely used for other purposes already and are not thought to pose significant risk.

Loading Bays

To facilitate delivery vehicles, Lewisham are considering installing charging points within loading bays, allowing vehicles to charge for a certain time period whilst loading or unloading goods. These charging points will be a mixture of standard trip-destination units and rapid units, providing options to the user; if the delivery vehicle has a short turnaround time, a rapid unit can be used for a quick top-up charge. Outside the hours of operation of the loading bay, these charging points can also be used by residents and other electric vehicle users.

The map below shows locations for all loading bays within the borough.



arging points for taxis

Key actions:

- Consider provision of rapid chargers in off-street locations and near taxi ranks
- Prioritise requests from taxi drivers for charging provision on-street near home for those with no off-street parking

TfL are creating a network of rapid chargers in the capital to support zero emissions capable (ZEC) taxis and commercial fleet vehicles. They seek to install 150 chargers by 2018 which will coincide with the requirement for new taxis to be ULEVs and in advance of the introduction of the ULEZ in 2019. This infrastructure will enable taxi drivers to maximise fuel savings and operate mostly in zero emission mode. It is also a requirement that as of 1st January 2018, no more new diesel taxis are licensed in London and all newly registered taxis are Zero Emission Capable. Lewisham are working collaboratively with key partners to deliver appropriate charging infrastructure for taxis.

One challenge is accommodating the demand for accessible charge points from the high concentrations of taxi and PHV drivers who live in the borough, who will need to ensure their vehicles are compliant with TfL's zero emission capable licensing requirements by 2020.

Objective 2

To ensure that provision and maintenance of EVCPs becomes cost neutral through the pursuit of infrastructure funding opportunities and income from the charging points

Key Tasks:

- To keep abreast of funding opportunities and apply for these where eligible
- Make use of the Source London model which pays a fee for each parking bay used by the scheme
- Develop a pricing strategy for points funded by the borough to ensure that income covers ongoing maintenance of charging points
- Make use of s106 agreements to help fund car club bays at new developments
- Ensure EVCP infrastructure implementation is incorporated into the policies, delivery plans and identified funding mechanism for Lewisham's LIP3 proposals
- To make best use of the Council's assets, such as car parks, town centres, housing estates and leisure centres
- Support local businesses in the take up of low emission vehicles by offering advice on the grants available to them

Funding Options

GULCS

Lewisham are part of the consortium of London Boroughs which can apply for funds through the GULCS framework mechanism for residential on-street charging networks, electrification of car club bays and the roll out of rapid charging infrastructure. The GULCS will be a key funding source for Lewisham to utilise for the delivery of a range of electric charging infrastructure. Following a GULCS bidding process, TfL have confirmed Lewisham have been awarded a portion of GULCS funding in 2018/19 to fund 75% of the costs for installing residential on-street charging facilities. The remaining 25% funding is intended to be provided by Lewisham's LIP mechanism.

The funding criteria states that the funding can be used up to a maximum of £7,500 for each free standing charging point and £2,000 for each lamp column charging point.

Lewisham will have the opportunity to source more GULCS funding in the next round of bidding, for 2019/20 delivery.

LIP3

Lewisham intends to apply for funding for electric vehicle charging points through its LIP. A revised Borough LIP (LIP 3) will be developed for implementation from April 2019. The new Mayor's Transport Strategy and LIP3 guidance has been circulated, to which boroughs must conform.

OLEV

The Office for Low Emission Vehicles (OLEV) is part of the Department for Transport and the Department for Business, Energy & Industrial Strategy. OLEV is a team working across government to support the early market for ultra-low emission vehicles (ULEV). They are providing over £600 million from 2015 to 2020 in funding to position the UK at the global forefront of ULEV development, manufacture and use. An additional £270m was announced at the 2016 Autumn Statement. This will contribute to economic growth and will help reduce greenhouse gas emissions and air pollution on UK roads.

OLEV allocated £1.5m of funding for 17/18 and £4.5m for 18/19 and 19/20 for on-street residential projects. This funding is available for eligible projects and similarly to the GULCS funding, Council's must secure a minimum of 25% of capital funds via sources other than OLEV funding, which makes available 75% of the capital costs.

Infrastructure Grants

The Government (as of January 2017) has committed almost £1bn to support Ultra Low Emission Vehicles (ULEVs) from 2015-2020. Of this funding, £32m has been committed for infrastructure. This has been broken down into the following schemes:

The Electric Vehicle Homecharge Scheme

OLEV is currently part-funding electric vehicle charging points for domestic installation. To help private plug-in vehicle owners offset some of the upfront cost of the purchase and installation of a dedicated domestic recharging unit, the Government is running the Electric Vehicle Homecharge Scheme. Customers who are the registered keeper, lessee or have primary use of an eligible EV may receive up to 75% (capped at £500, inc. VAT) off the total capital costs of the charge point and associated installation costs. Customers must provide evidence of keepership, lease, be named as the primary user of an eligible EV or have a vehicle on order in order to be able to qualify for the grant.

The Workplace Charging Scheme

The Workplace Charging Scheme is a voucher-based scheme that provides support towards the up-front costs of the purchase and installation of EVCPs for employee and fleet use. The contribution is limited to £300 for each socket up to a maximum of 20 across all sites for each application. The voucher will be valid for 4 months (120 days) from the date of issue, (expiry date printed on the voucher). Once the charge point(s) have been installed, the authorised installer will claim the grant from OLEV on the applicant's behalf by submitting a PDF claim form via OLEV's portal.

The On-street Residential Charging Scheme

This grant is available to councils who wish to install on-street charge points in residential areas. This encourages the installation of chargers in these un-commercially viable areas which are not attractive to private companies.

OLEV will fund 75% of all capital costs up to £7500. This includes the equipment, installation and costs associated with the bay and TMO.

Plug-in Car Grant

OLEV will offer a grant to subsidise new ULEVs. The funding depends upon which category the vehicle falls into, as shown in the Figure below.

Categories of OLEV Grant Funding

Requirement		Grant	Examples
Category 1	Cars with a zero emission range of over 70 miles	£4,500	Full EVs such as BMW i3 and Nissan LEAF
Category 2	Cars that have CO ₂ emissions of less than 50g/km and a zero emission range of between 10 and 69 miles	£2,500 (If vehicle under £60k)	Hybrids such as the Audi A3 e-tron and Toyota Prius Plug-in)
Category 3	Cars with CO ₂ emissions of 50 to 75g/km and a zero emission range of at least 20 miles	£2,500 (If vehicle under £60k)	

Plug-in Van Grant

A more generous grant is available for commercial vehicles. There are currently very few ULEV vans and the higher subsidy represents the desire to drive adoption in this category. For vans under 3.5T there is a grant of 20% of the price (up to £8000) and for those over 3.5T there is a 20% grant capped at £20000. This will be reviewed either after 5000 applications or in 2018 depending on which is reached first.

OLEV also fund other projects such as the Go Ultra Low Scheme which awarded £40million to four cities to carry out innovative projects which aid the adoption of ULEVs. It also funded the Plugged-in Places project which created regional charging networks such as Source London.

Go Ultra Low Cities Scheme

The Go Ultra Low Cities scheme is part of a wider £600 million investment from the Government to encourage EV uptake in the UK through a step change in ULEV car uptake in their locality, including criteria for the bids included improvements in air quality, innovation, and linking with other OLEV schemes.

Rapids

TfL have publicised their rapid charging framework, offering the scheme to local authorities within London. They are proposing to identify locations across TfL, borough and private land which would be capable of hosting EV rapid charging infrastructure.

Under the scheme, chosen locations would be tendered out to six charge point operators who will bid for a concession contract to install, operate and maintain rapid charge points at their own cost. TfL will fund the installation of the power infrastructure and street furniture. TfL is working with the boroughs and investing £18million to unlock potential sites, including upgrading the power supply.

Charging Point Providers

Rapid Charging

There are several other operators who will fund and manage rapid chargers. Source London /Bolloré is most notable in London, others include Engenie and InstaVolt.

Destination Charging

There are many network operators who provide trip destination chargers. Each network operates a different business model but they can be separated into those who lease the land from councils and those who sell chargers to councils and profit from fees charged to the user. Within London, the two largest networks are POLAR and Source London.

Source London

Source London is operated by Bolloré Ltd., on behalf of TfL. The network currently consists of over 1000 EVCPs but there are ambitious plans to greatly expand this number, with over 2000 by 2019. Users are required to pay a monthly subscription and can then operate the charge points via an RFID card.

Expanding the existing Source London network would be a quick win for Lewisham. At no cost, an additional network of chargers could be installed and the council would continue to receive an annual income which could be reinvested into other electric vehicle schemes.

Lewisham wishes to provide a mix of charge points, operating parallel networks within the borough. The following is an example of a charge point manufacturer and operator which would be a suitable alternative.

POLAR

The POLAR network is the UK's largest charging network (outside London) with over 12000 points. It is owned by EVCP manufacturer Chargemaster. The company operates points across the country and holds contracts with numerous councils including Milton Keynes and the City of London.



Users operate the chargers using either an app or RFID card. There is the option to either pay for a monthly subscription or to pay on an ad hoc 'pay as you go' basis. This provides flexibility to occasional users who can arrive at a charger, download the app and charge with no prior planning, whilst offering convenience to regular users who simply tap their card on the reader. The pricing aims to be cheaper than charging at home: 9p/kWh for members.



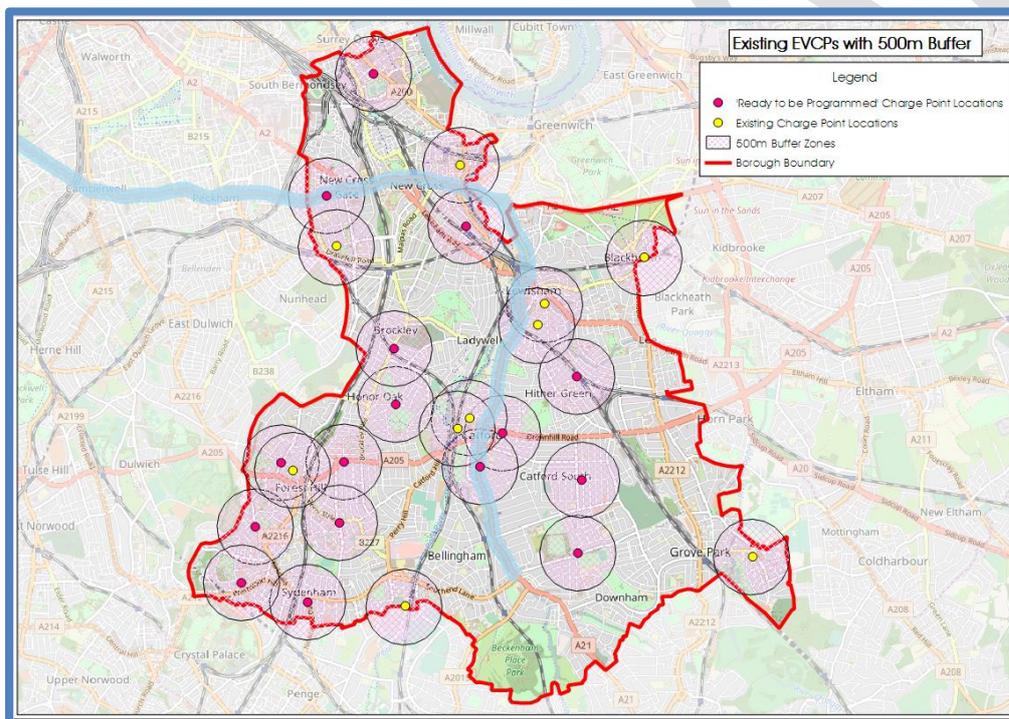
Objective 3

To ensure the charging network remains fit for purpose, can cater for future expansion and is adaptable to emerging technologies

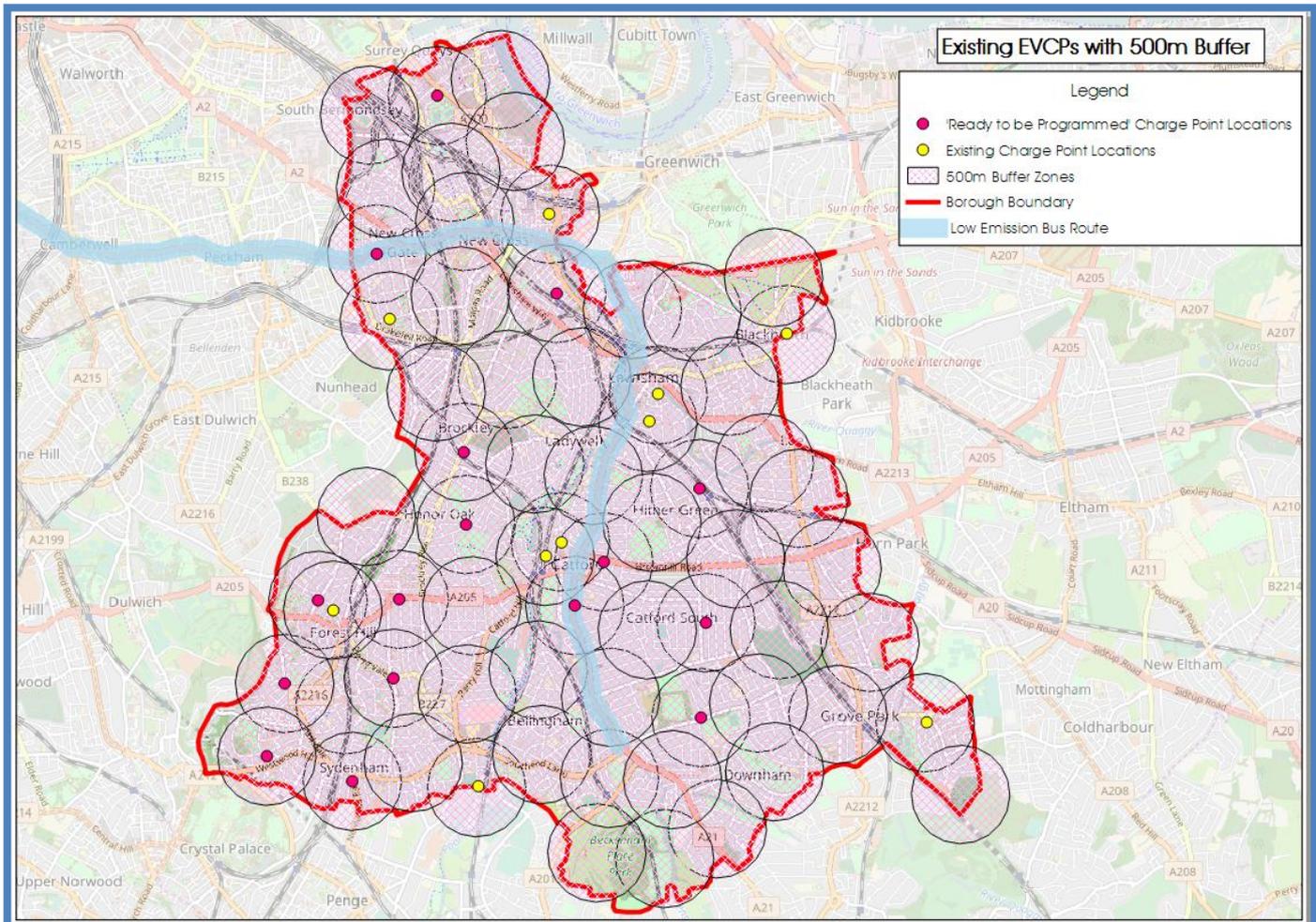
Key actions:

- Monitor usage data from charging units to ensure that they are well located, used and promoted
- When installing EVCPs of any type, consider active and passive provision i.e. lay cabling for provision of further points in the future so additional installations are quicker and more cost effective
- Keep abreast of emerging technologies and work with the private sector to deliver trials
- Apply best practice from across the UK to provide the best possible electric vehicle provision

Catering for Future Expansion

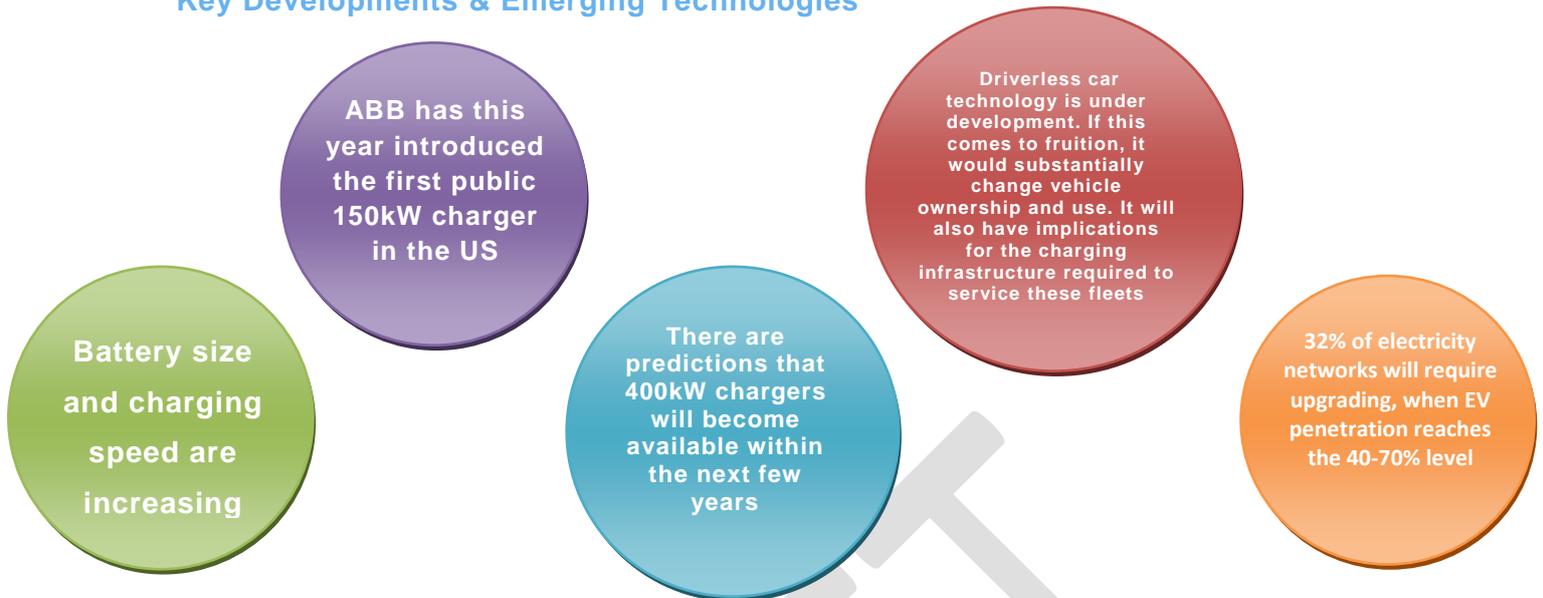


The map to the left shows 500m buffers around all existing charge point locations within Lewisham. The map overleaf shows how many buffers would be required to give full coverage to the borough, and achieve our target of having everyone within 500m of a charging point. 500m takes around 5-10 minutes to walk, depending on walking speed (slow to fast)

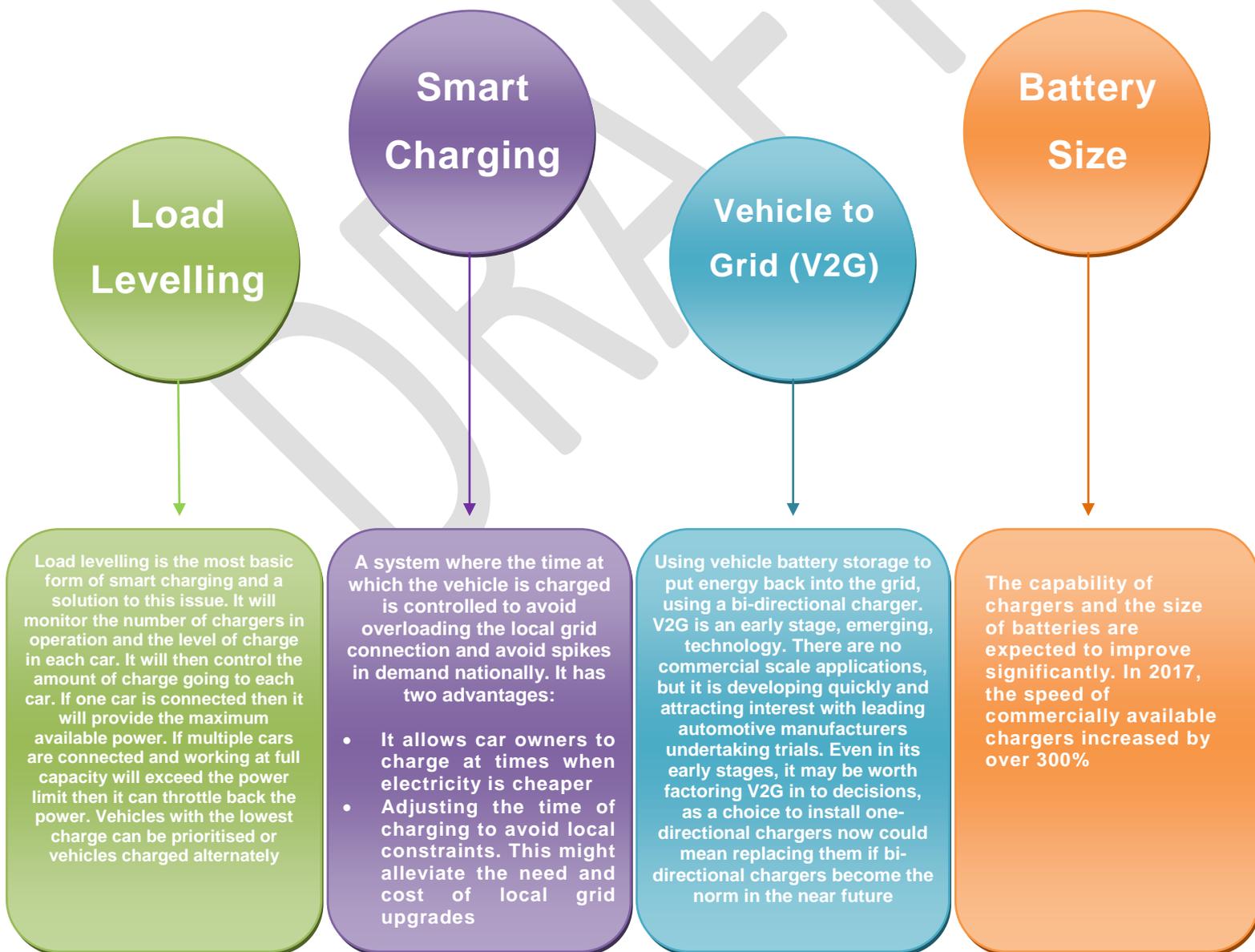


Lewisham will need to install charge points in 41 additional locations, in addition to those already on-street or ready to be programmed, in order to give the entire borough 500m or less coverage. This would mean a total of 67 locations. Multiple units should be installed at each site.

Key Developments & Emerging Technologies



Future Innovations



Objective 4

To encourage the uptake of electric vehicles through supporting policy frameworks, initiatives, and public engagement, drawing on best practice from around the UK and beyond

Key actions:

- Review parking policy to consider how to encourage uptake of electric vehicles in all types of bays
- Review Local Plan policy to consider how to encourage uptake of electric vehicles and ensure that London Plan standards are implemented
- Consider power supply needs in Lewisham's Infrastructure Delivery Plan
- Consider a strategic EVCP levy through CIL to fund charging infrastructure
- Consider introduction of innovative schemes that encourage electric vehicle uptake such as Low Emission Streets/Neighbourhoods
- Run engagement events and consider vehicle trials in partnership with the private sector to raise public awareness and acceptability of electric vehicles
- Invite members of the public to put forward suggestions for new charging point locations
- Carry out a review of EVCP strategy by 2025 to ensure delivery of action plan targets and proposals

5. CHAPTER FIVE

Delivery Plan and Monitoring

This section provides an action plan of deliverables that Lewisham are hoping to achieve, summarising the actions listed earlier in the strategy.

<u>Objectives</u>	<u>Action / Tasks</u>	<u>Time Scale:</u> <u>Short term: <2yrs</u> <u>Medium: 2-5 yrs</u> <u>Long term: 5+ yrs</u>	<u>Funding Source</u>	<u>Targets/ Indicators</u>	<u>Relevant Page Numbers</u>
<p>1.</p> <p>To support the following types of charging through provision of appropriate infrastructure in the right locations:</p> <ul style="list-style-type: none"> a) Charging points in residential areas b) Charging points in town centres, workplaces and at other key destinations c) Charging points for car club vehicles d) Charging points for freight and servicing vehicles e) Charging points for taxis 	<ul style="list-style-type: none"> a) Charge points for residential areas <ul style="list-style-type: none"> • Install even spread of 7kW chargers throughout residential areas where there is sufficient footway space, focusing on achieving 500m coverage in the first instance (see page 37) • Consider and prioritise requests from residents for new on-street charging points, delivering this through a mixture of lamp column chargers and 7kW chargers • Deliver lamp column chargers in clusters or across whole street • Work with Lewisham homes to identify locations for 7kW and lamp column chargers in the Council's housing estates • Consider creating charging hubs co-located with other sustainable transport modes i.e. cycle parking and car club vehicles b) Charge points for Town Centres, workplaces and other key destinations <ul style="list-style-type: none"> • Install 7-22kW chargers at key destinations, such as town centres, working with a range of operators • Encourage supermarkets, leisure centres and workplaces to install charging provision in their car parks • Contact petrol stations to ask that they consider installing rapid charging points • Choose locations where chargers will generate a sufficient level of usage demand to ensure the unit becomes self financing • Consider location of points along the low emission bus corridor c) Charge points for car club vehicles <ul style="list-style-type: none"> • Gradually install charge points in fixed car club bays, with 100% coverage by 2025 • Install an even spread of 7kW chargers across the borough, which point-to-point car club providers can also utilise • Install EVCPs in any new fixed car club bay from the outset, with a requirement that the vehicle serving it is an electric vehicle • Any new point-to-point provider permitted to operate in the borough should have at least 50% electric fleet, with a view of reaching 100% by 2025 	<p>Short, medium and long term</p>	<p>GULCS/ OLEV/ LIP/ TfL</p>	<p>All residents/businesses/visitors no more than 500m from a charging point (41 additional locations, total of 67) by 2020, with at least 2 charge points at each location (134 in total). Over 300 across the borough by 2025</p> <p>Installation of 4 rapid chargers by 2018/19 and 10 by 2020, led by TfL</p> <p>Keep working towards electrifying our current and future car club fleets, with 100% by 2025</p> <p>Any new point-to-point provider permitted to operate in the borough should have at least 50% electric fleet, with a view of reaching 100% by 2025</p> <p>Increase proportion of electric vehicles in Lewisham from 1.4% to 2% by 2022 and above 10% by 2025</p>	<p>p26</p>

	<ul style="list-style-type: none"> • Create a new permit for car club vehicles through the parking policy review <p>d) Charge points for freight and servicing vehicles</p> <ul style="list-style-type: none"> • Work in partnership with TfL to deliver a network of rapid chargers across the borough • Encouraging businesses with off-street servicing/parking to install charging points • Exploring the possibility of installing charging points in loading bays • Trial electric vehicle charging points for market traders <p>e) Charge points for taxis</p> <ul style="list-style-type: none"> • Consider provision of rapid chargers in off-street locations and near taxi ranks • Prioritise requests from taxi drivers for charging provision on-street near home for those with no off-street parking 				
<p>2.</p> <p>To ensure that provision and maintenance of charging points becomes cost neutral through the pursuit of infrastructure funding opportunities and income from charging points</p>	<ul style="list-style-type: none"> • To keep abreast of funding opportunities and apply for these where eligible • Make use of the Source London model which pays a fee for each parking bay used by the scheme • Develop a pricing strategy for points funded by the borough to ensure that income covers ongoing maintenance of charging points • Make use of s106 agreements to help fund car club bays at new developments • Ensure EVCP infrastructure implementation is incorporated into the policies, delivery plans and identified funding mechanism for Lewisham's LIP3 proposals • To make best use of the Council's assets, such as car parks, town centres, housing estates and leisure centres 	Short to medium term	Section 106 and CIL	Apply for all rounds of funding made available by OLEV, GULCS and TfL	P31

<p>3.</p> <p>To ensure the charging network remains fit for purpose, can cater for future expansion and is adaptable to emerging technologies</p>	<ul style="list-style-type: none"> • Monitor usage data from charging units to ensure that they are well located, used and promoted • When installing EVCPs of any type, consider active and passive provision i.e. lay cabling for provision of further points in the future so additional installations are quicker and more cost effective • Keep abreast of emerging technologies and work with the private sector to deliver trials • Apply best practice from across the UK to provide the best possible electric vehicle provision 	<p>Short, medium and long term</p>		<p>Regular review meetings with EV charging providers</p> <p>As standard design, look to deliver EVCP's or enabling works for EVCP's on highway and public realm schemes</p> <p>Continue active membership of EV Stakeholder Groups sharing good practice and incorporating new ideas back into Lewisham's options</p> <p>To encourage the uptake of electric vehicles through supporting policy frameworks, initiatives and public engagement, drawing on best practice from around the UK and beyond</p>	<p>p36</p>
<p>4.</p> <p>To encourage the uptake of electric vehicles through supporting policy frameworks, initiatives and public engagement, drawing on best practice from around the UK and beyond</p>	<ul style="list-style-type: none"> • Review parking policy to consider how to encourage uptake of electric vehicles in all types of bays • Review Local Plan policy to consider how to encourage uptake of electric vehicles and ensure that London Plan standards are implemented • Consider power supply needs in Lewisham's Infrastructure Delivery Plan • Consider a strategic EVCP levy through CIL to fund charging infrastructure • Consider introduction of innovative schemes that encourage electric vehicle uptake such as Low Emission Streets/Neighbourhoods • Run engagement events and consider vehicle trials in partnership with the private sector to raise public awareness and acceptability of electric vehicles • Invite members of the public to put forward suggestions for new charging point locations • Carry out a review of EVCP strategy by 2025 to ensure delivery of action plan targets and proposals 	<p>Short, medium and long term</p>		<p>Review London Plan when available and make any changes to that are appropriate</p> <p>Invite private companies to Council run events such as Peoples Day to promote EV technologies</p> <p>By December 2018 Launch a new online application form for EVCP requests</p> <p>Set up a Review of objectives and Targets of Lewisham's Low Emission Vehicle Charging Strategy by December 2025</p> <p>Investigate funding options for providing Taxi and wider Fleet charging options</p>	<p>p39</p>

APPENDIX

The table below projects the number of ULEVs in London boroughs and further supports the growth line in the 'EV ownership; Lewisham' graph. There are projected to be 5, 298 ULEVs in Lewisham in 2025 (high scenario) or 1, 398 in 2025 (baseline scenario).

Table 1

Borough Name	Baseline Scenario			High Scenario		
	2015	2020	2025	2015	2020	2025
Barnet	332	2,200	9,215	332	4,741	16,337
Richmond upon Thames	276	1,719	7,372	276	3,872	11,839
Hillingdon	243	1,598	6,764	243	3,469	17,541
Croydon	216	1,661	6,618	216	3,214	13,322
Westminster	204	1,314	5,593	204	2,893	7,832
Wandsworth	195	1,310	5,460	195	2,793	10,022
Redbridge	173	1,208	4,970	173	2,506	11,261
Ealing	157	1,263	4,963	157	2,373	11,270
Brent	153	1,208	4,768	153	2,293	8,551
Harrow	153	1,078	4,428	153	2,226	10,718
Bexley	142	1,128	4,440	142	2,127	10,247
Islington	137	916	3,831	137	1,964	5,397
Camden	131	1,060	4,169	131	1,984	6,151
Kensington and Chelsea	127	802	3,431	127	1,794	5,917
Tower Hamlets	123	871	3,553	123	1,784	5,567
Bromley	119	1,053	4,034	119	1,860	12,677
Enfield	110	966	3,695	110	1,710	10,835
Kingston upon Thames	101	716	2,933	101	1,468	7,453
Haringey	98	716	2,897	98	1,433	6,295
Hammersmith and Fulham	85	577	2,390	85	1,216	4,615
Sutton	79	688	2,648	79	1,224	8,103
Hounslow	78	728	2,741	78	1,235	7,070
Waltham Forest	71	650	2,457	71	1,117	6,512
Havering	67	788	2,777	67	1,162	8,805
Hackney	64	536	2,080	64	981	4,018
Lambeth	56	476	1,840	56	864	5,098
Greenwich	53	444	1,714	53	808	6,065
Merton	52	506	1,890	52	839	5,105
Southwark	48	435	1,654	48	758	3,636
Lewisham	36	386	1,398	36	599	5,298
Newham	31	311	1,136	31	501	4,157
Barking and Dagenham	21	309	1,038	21	399	4,210
City of London	16	106	447	16	232	525

The table below lists the locations of the existing 3kW and 7kW standard charge points installed within Lewisham; these points may be found on the charge point map on Page 13.

Table 2

No.	Road Name	Post Code	Supplier	Location	Costs	Additional Information
01	Clipper Way-Slaithwaite Road	SE13 6NA	Source London, 3kW and 7kW	Public Car Park; 5 devices	RFID card £4/month + 3.6p/min(minimum 20 mins)	Parking charges may apply
02	Blackheath Grove	SE3 0DG	Source London, 3kW and 7kW	Public Car Park; 1 device	RFID card £4/month + 3.6p/min(minimum 20 mins)	Parking charges may apply
03	Holbeach Road	SE6 4SA	Source London, 3kW and 7kW	Public Car Park; 5 devices	RFID card £4/month + 3.6p/min(minimum 20 mins)	Parking charges may apply
04	Pearcefield Avenue	SE23 3EU	Source London, 3kW and 7kW	Public Car Park; 4 devices	RFID card £4/month + 3.6p/min(minimum 20 mins)	Parking charges may apply
05	Frankham Street NOTE: one unit not installed here, it looks as though there were plans to (fault registered on Zap-Map)	SE8 4RH	Source London, 3kW and 7kW	Off-street Parking; 4 devices	RFID card £4/month + 3.6p/min(minimum 20 mins)	Parking charges may apply
06	Kitto Road	SE14 5SG	Source London, 3kW and 7kW	On-Street; 2 devices	RFID card £4/month + 3.6p/min(minimum 20 mins)	Parking charges may apply
07	Riddons Road	SE12 9RB	Source London, 3kW and 7kW	On-Street; 2 devices	RFID card £4/month + 3.6p/min(minimum 20 mins)	Parking charges may apply
08	Doggett Road	SE6 4QA	Source London, 3kW and 7kW	On-Street; 1 device	RFID card £4/month + 3.6p/min(minimum 20 mins)	Parking charges may apply
09	Kangley Bridge Road/ Westerly Crescent	SE26 5DD	Source London, 3kW and 7kW	Public Car Park; 2 devices	RFID card £4/month + 3.6p/min(minimum 20 mins)	
10	Clarendon Rise Car Park site 3	SE13 5ES	Source London, 3kW and 7kW	Public Car Park; 5 devices	RFID card £4/month + 3.6p/min(minimum 20 mins)	Parking charges may apply