

MAYOR OF LONDON



Mayor's Air Quality Fund Completion Report

ROUND 2

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Introduction

The Mayor is committed to cleaning up London's air. He has nearly doubled TfL's spend on air quality and is bringing in hard-hitting measures to reduce air pollution and protect public health. These include introducing the world's first Ultra Low Emission Zone in central London, cleaning up London's bus and taxi fleets and taking action to reduce exposure to air pollution at some of the most polluted schools in London. Monitoring shows that the central London ULEZ is working; NO2 concentrations at roadside locations in central London have dropped by a third since the Mayor confirmed the introduction of the Toxicity charge (in February 2017) until 6 months into the ULEZ (September 2019). The ULEZ will be expanded London-wide for heavy vehicles in October 2020 and to the North and South Circular for all vehicles in October 2021.

London boroughs have a key role to play in addressing air pollution. Under the Mayor's statutory London Local Air Quality Management (LLAQM) system they must monitor and act on air pollution, including delivering against a statutory local Air Quality Action Plan. Boroughs have a range of powers and levers to help reduce pollution, such as management of all streets other than the Transport for London Road Network (TLRN) and the control of parking. They

therefore have a vital role in making local improvements to reduce emissions and exposure, particularly in polluted hotspots.

The Mayor's Air Quality Fund (MAQF) is designed to help the boroughs trial local measures to cut pollution and exposure to pollution and share learnings and outcomes with each other, including via a series of workshops and events organised by the GLA and TfL. The fund is delivered jointly by the Mayor and TfL, and the objectives of the MAQF are to:

- support boroughs to reduce PM and NO2 concentrations across London
- support projects that will help to deliver against some of the Mayor's key priorities
- maximise investment by securing match funding from boroughs and other sources
- provide a clear understanding of the impact of different measures through robust monitoring and knowledge sharing

The funding is linked to the LLAQM, with key actions from the LLAQM guidance prioritised for funding. MAQF is providing boroughs with £22m funding in total over 9 years, split into three funding rounds for projects lasting three years in duration.

The second round of the MAQF allocated £10m between April 2016-2019.

The Mayor has also provided a further £1m (from the London Economic Action Partnership) through the Mayor's Air Quality Business Fund (MAQBF). This has supported the delivery of six Business Low Emission Neighbourhoods (BLENs). The BLENs were rolled out either directly by Business Improvement Districts (BIDs), or by councils working in partnership with local businesses and organisations.

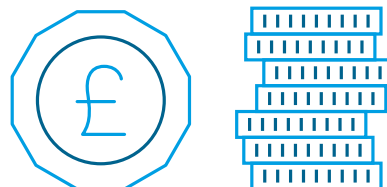
All the projects and BLENs were match funded by delivery partners from both public and private sources. This has brought the total investment in Round 3 of the MAQF plus BLENs to more than £20m in three years.

This report summarises the outcomes from the second round of the MAQF and the six Business Low Emission Neighbourhoods. This funding has enabled a host of innovative trials including the world's first Ultra Low

Emission Vehicle (ULEV) only streets, and the UK's first diesel surcharge on metered parking. These trials have led the way for similar improvements to be rolled out elsewhere; the ULEV streets scheme has blazed a trail for Zero Emission Zones, several of which are planned for the City of London; and the diesel surcharge on metered parking at the Marylebone LEN has subsequently been expanded to cover the whole of the borough of Westminster. A number of other schemes and initiatives from Round 2 of the MAQF are also being expanded. This includes the Non-Road Mobile Machinery and Idling Action projects, which are now being delivered across London; and the electric bike trial in the Greenwich LEN and the Green Courier Service in Walthamstow Village, which are being rolled out across the respective boroughs.

£22m

funding in total over 9 years, split into three funding rounds for projects lasting three years in duration is being provided by MAQF to boroughs.



Some highlights

This round of the MAQF and the MAQBF have brought the ground-breaking Low Emission Neighbourhood (LEN) concept to life. Through the LENs, targeted and bespoke measures have been introduced at 11 polluted locations across London. The fund has also supported other projects covering everything from idling engines to improving air quality at schools and tackling construction pollution. You'll find full details of the projects and their results in part 3 and 4 of this document.

Some of the major successes and cumulative impacts from the BLENs and Round 2 of the MAQF are highlighted on the next page. It is worth noting that it is not possible to show all the cumulative benefits of the schemes because the analytical techniques used are different. Some have used estimated emissions reductions, while others have used local pollution monitoring. Secondly, it is challenging to measure how much a local scheme has individually contributed to monitored reductions compared with the

impact of other local/regional initiatives. The areas that hosted the Archway Zero Emission Network and BLEN, for example, measured an average 40ugm-3 reduction in pollution levels following the introduction of these schemes. Yet it would be unreasonable to claim this was all a direct result of these projects. Obviously, many other factors (such as cleaner buses and local gyratory improvements) will have contributed. This means that the benefits set out below will be a conservative assessment and just a snapshot of some of the combined benefits delivered by the MAQF and BLEN projects.

key highlights and cumulative impacts

key highlights

16.5

Tonnes of PM and 297 Tonnes of NOx cut through the South London Non-Road Mobile Machinery project. Based on estimated calculated emissions reductions



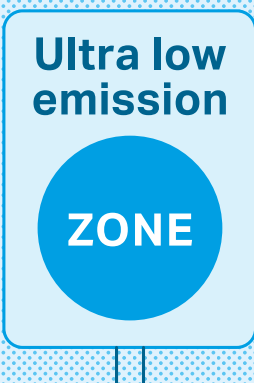
16%

reduction in older more polluting vehicles parking in the Marylebone LEN as a result of the diesel surcharge on metered parking, with no displacement to nearby areas.



16%

World's first Ultra Low Emission Streets in the Hackney LEN, contributing to an estimated 16% reduction in NO2 emissions across the LEN



13

awards received so far



Cumulative benefits

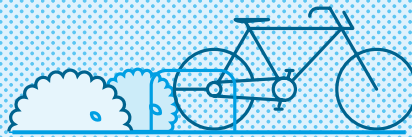
26

new clean air routes helping pedestrians reduce their exposure to pollution by up to 60%



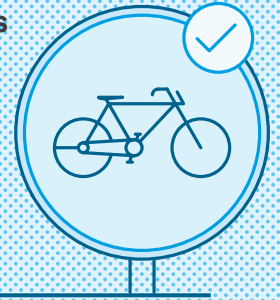
924

secure and standard cycle parking spaces installed



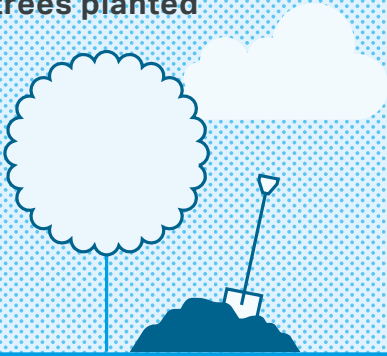
2.4km

of new/improved cycle routes



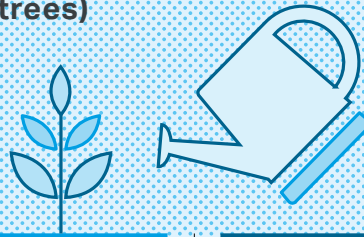
218

trees planted



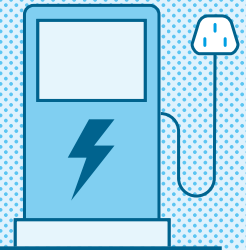
+2918sq.m

of new greening to help reduce exposure to pollution (excluding trees)



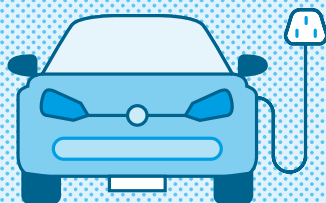
333

standard and 11 rapid electric vehicle chargers installed



53

diesel/petrol vehicles replaced by electric models



30

new cargo bikes making zero emission deliveries



3787

businesses actively engaged with, and supported to reduce their emissions (through workshops, events, meetings, and 1:1 support)



+500,000

online engagements/interactions recorded (includes clicks, tweets, followers, Youtube views, website views etc)



3. Low Emission Neighbourhoods and Business Low Emission Neighbourhoods

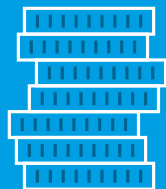
LENs are reducing pollution at 11 London hotspots through measures such as changes to streetscapes and new cycling infrastructure and walking routes.

Other measures include EV charging points, cleaner vehicles incentives and disincentives for dirty vehicles, greening to reduce exposure to pollution and enhance areas for walking and cycling, events, and support to reduce emissions. LENs and BLENs are not only a chance to improve air quality, they can also contribute to improving community health and wellbeing. At the same time, they help to reduce noise, carbon emissions, community severance and social isolation. LENs have been given £1m each by the Mayor, while the BLENs received up to £200,000 each to help businesses reduce pollution.

The Mayor has supported five new borough-led Low Emission and six Business Low Emission Neighbourhoods.

£1m

have been given to each LEN by the Mayor, while the BLENs received up to £200,000 each to help businesses reduce pollution



3.1 BARBICAN LEN (City of London)

The Barbican is an area of the City of London with a high resident population. Like most of the Square Mile it has high levels of air pollution. The City of London LEN aimed to act as a test bed to pilot measures to improve air quality. If successful, these could be rolled out across the borough.

The objectives of the LEN were to:

- reduce emissions of air pollutants
- reduce exposure to air pollution
- raise awareness of air quality and its associated impacts
- monitor and understand air pollution in the LEN focus area

Key achievements:

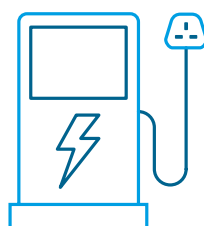
- Thirty EV charging bays installed on the Barbican Estate, plus two to service local fleets (22 charging units providing capability for 30 charging bays)
- A zero-emission taxi rank on Nobel Street to encourage use of Low Emission Taxis
- Positive business engagement with 50+ businesses in and around the LEN focus area. As a result, 34 businesses acted on air quality, and eight Delivery and Servicing Plans were completed
- Successful pilot of a zero-emission delivery service in Smithfield Market. This has led to a full-time cargo-bike delivery service-based in Smithfield car park

- A small decrease in annual NO₂ emissions in most core LEN areas. Nine of the 14 monitoring sites in the LEN registered a small reduction (around 3-4 micrograms) of NO₂. Of the five that didn't, one site remained level and four noted small increases of 2-3 micrograms. Two of these can be explained by roadworks/ construction nearby
- 250m² of new green infrastructure, including a new parklet
- Eighteen pop up clean air gardens (as well as the green infra above)
- Two hundred new secure cycle parking spaces

A Zero Emission Zone for Beech Street (a highly polluted covered street by the Barbican). This scheme was delayed but should start in 2020 with a permanent scheme in place by 2022.

30

Thirty EV charging bays installed on the Barbican Estate, plus two to service local fleets.



3.2 CITY FRINGE LEN (Hackney, Islington and Tower Hamlets)

The City Fringe LEN is a tri-borough scheme involving Hackney, Islington and Tower Hamlets, covering the South Shoreditch area.

The project transformed public space. It also introduced a scheme to restrict access to only cyclists, pedestrians and Ultra Low Emission Vehicles (ULEVs) in five LEN streets at peak times.

Key achievements:

- Introduction of the world's first ULEV Streets scheme
- Study area-wide reduction of 12.5 per cent (13,338) in the number of vehicles observed during the 7am to 7pm period
- Twenty one out of 25 study locations reported a reduction in vehicles observed
- Area wide reduction of 8 per cent (11,088 vehicles) in overall traffic movements reported on the core road network (ANPR data, 7-7)
- Area wide reduction of 21 per cent (8,106) in overall traffic movements on local roads (ATC data, 24hr). This is estimated to be a reduction of 10,551 motor vehicles (21 per cent)
- Based on recorded vehicle reductions, estimated local emissions reductions are:
 - **NO₂**: -16 per cent
 - **PM_{2.5}**: - 13 per cent
 - **PM₁₀**: -13 per cent
 - **CO₂**: -15 per cent
- Introduction of several diverse and transformational greening projects, including a green wall, planted "LEN" prism-shaped signage, and five parklets
- Major new public space schemes and reallocation of road space to cyclists and pedestrians. This includes a new space in Worship Square and a revamp of Rivington Square
- Nine new electric vehicle charging points, with 41 more in place by the end of 2019
- Four new or improved cycle lanes.
- Two road closures to create new public spaces (Garden Walk and Clifton Street)
- Twelve new or improved walking routes
- Sixty-two new cycle parking spaces
- Thirteen trees and 26 square meters of green wall



3.3 GREENWICH TOWN CENTRE LEN (Greenwich)

Several pollution reduction schemes and new infrastructure was installed on the busy Trafalgar Road and around the historic Greenwich centre. As well as direct benefits, this scheme has paved the way for the Greenwich Town Centre Liveable Neighbourhood. This proposes that the traffic choked town centre gyratory be removed to create more space for walking and cycling.

Key achievements:

- A new 500m high-quality walking, cycling and public transport corridor through the LEN, along Trafalgar Road with nine continuous footways and wider footways. It also has lightly segregated cycle lanes in both directions; 24-hour bus lanes and a peak time loading ban (7-10am & 4-7pm)
- More electric vehicle infrastructure to boost uptake of EVs – 17 additional electric vehicle charging points have been installed within the LEN
- Seven new electric car club vehicles
- Four public space schemes on the west and east of the LEN. Together these will create a more human-friendly neighbourhood, a key aim of the Greenwich LEN. The green infrastructure helps to absorb pollution from busy roads. Streetscape improvements meanwhile create

pedestrian-friendly walking routes, and nice spaces for residents to dwell

- The local e-bike loan scheme gave residents the opportunity to trial an electric bike for a month. It was so successful the scheme has been rolled out across the borough
- Greenwich Car Free Day transformed the town centre and gave locals the chance to enjoy a traffic free town centre. This supported the development of the Greenwich Town Centre Liveable Neighbourhood programme. This will further improve local public space, plus walking and cycling links, connecting the above LEN schemes in west and east Greenwich
- The walking, cycling and bus reliability improvements in the Trafalgar Road corridor will support better design/delivery of Cycle Future Route 11

500m

new high-quality walking, cycling and public transport corridor through the LEN, along Trafalgar Road with nine continuous footways and wider footways.



3.4 ILFORD GARDEN JUNCTION (Redbridge and Newham)

This ambitious project spans two major roads and three different Highways Authorities. Due to its complex nature, the project has been extended until April 2020. It aims to influence modal shift for travel through the hostile and very busy Ilford Junction. It is the only route to walk and cycle to and from the town centre and train station from several locations. The project will make this junction safer, greener, cleaner, and quieter by putting in place the following measures:

- Carriageway reduction and realignment to provide space for a segregated two-way cycle lane through the junction, better walking infrastructure, and lower vehicle speeds.
- Reduce pollution exposure, noise and improve the walking and cycling environment using planting to make a barrier between the road and the pavement
- Improve the environment for walking and cycling through by putting in structural lighting
- Create a pocket park on the banks of the River Roding

“The project will make this junction safer, greener, cleaner, and quieter by putting in place Carriageway reduction and realignment to provide space for a segregated two-way cycle lane through the junction, better walking infrastructure, and lower vehicle speeds.”

3.5 MARYLEBONE LEN (City of Westminster)

This project has improved public space by reducing the car dominance and providing more pleasant conditions for pedestrians. There is also more and better green infrastructure.

Alongside these changes, several behaviour change measures were introduced. This has helped to embed sustainable practices in the wide community. The council worked with local groups to co-deliver these schemes. They include Marylebone Green Club Building Energy Efficiency Scheme and an Area-wide Delivery and Servicing Programme. The use of cleaner vehicles has been encouraged through emissions-based parking charges and new EV charging points. Other schemes include smart management of Taxi-ranks and fast charging, an Electric Delivery Vehicle Scheme with UPS and no-idling enforcement. In addition, there have been awareness raising and campaign days, a schools engagement scheme and new play streets.

Key achievements:

- UK's first emissions-based on-street parking surcharge for older more polluting diesel vehicles. This reduced the number of these vehicles in the area by 16 per cent
- Indoor Air Quality Information Guide published, plus indoor monitoring in one business
- Delivery and servicing workshops and presentations open to all local businesses
- Eighty-four businesses using the deliver BEST online delivery reduction support tool as part of the Delivery and Servicing Programme
- Sixty-one EV charge points installed across the public and private sector
- Four urban realm projects (13 trees, 17 rain gardens totalling 180m², 16 cycle parking spaces, 12 secure cycle storage spaces, 12 improved walking environments)
- Seven play street events for 1,100 children
- Schools engagement programme for 13 schools
- Two dedicated anti-idling marshals dealing with 900 idling incidents per month
- Support for taxis through Park Right app
- The emissions-based parking and the anti-idling work has now been rolled out across the borough

Business Low Emission Neighbourhoods

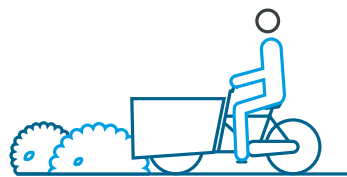
3.6 ARCHWAY VILLAGE BLEN (Islington Council and the Archway Town Centre Group)

The project aimed to turn the central Archway area into a haven for pedestrians and cyclists with additional provision for electric vehicle users. This was done by installing new green infrastructure, EV charging points and green walking routes to help reduce local air pollution. These improvements have made the area more pleasant for everyone, and it is now a more attractive area to live and work in.

Key achievements:

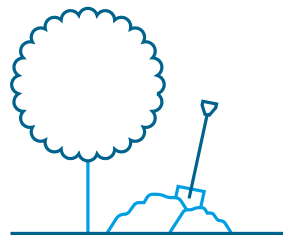
- Creating a Clean Air Walking route from Whittington Hospital to Archway Town Centre Group including various public space improvements and 15 wayfinding signs
- Removing four car parking spaces to create build out and planting outside Vorley Road's Children Centre
- Introducing an electric vehicle for shared use of eight local businesses to reduce their use of diesel vehicles for trips and deliveries
- A new pool cargo bike hire scheme with eight cargo bikes for local businesses
- Some 26 new trees, 280 square meters of green wall (including green screens outside the Whittington Hospital), and a parklet

A new pool cargo bike hire scheme with eight cargo bikes for local businesses



26

new trees, 280 square meters of green wall (including green screens outside the Whittington Hospital), and a parklet



3.7 BOROUGH HIGH STREET BLEN (Better Bankside and Team London Bridge BIDs)

This project aimed to make businesses more aware of their impacts on local air quality and change behaviour through their servicing and delivery strategies. It also encouraged people to use quieter less polluted streets to move through this busy and congested area. The project delivered a range of innovative and eye-catching public realm improvements along with practical support for businesses.

Key achievements:

- Some 414 vkms per week cut through the Borough Market Waste Consolidation Project (reducing NOx by 97 per cent and PM2.5 by 47 per cent)
- Two new Clean Air Routes (including one to Guys Hospital) which include public space improvements and green infrastructure
- A beautiful and bio-diverse 75m² Green Wall on Collingwood Street to support the Inns and Yards low exposure route
- Rollout of the eye-catching #BetterAir planted letter sculptures to raise awareness of the issues around air pollution
- Rollout of #BetterAirBenches across the area to raise awareness of using quieter routes to reduce exposure to air pollution. These modular benches contain planting inside them, as well as panels with air pollution information. These benches provide a place to sit and rest and are highly transportable. That means they can be used for road closures and events, as well as to meet the need for seating in and around Borough Market
- A new Tooley Street Totem to help aid navigation from London Bridge Station to Bankside via low exposure routes
- Some 111 businesses and over 3,000 people were directly engaged through 12 events and workshops. Example outcomes include 1,048 fewer deliveries to Ernst and Young per year



Orchard-Lisle Living Wall
Collingwood Street

3.8 EUSTON BLEN (Euston Town BID)

To create a clean air route between Euston Station and Regents Park with greening and public realm interventions, an art installation, and signage. The initiative has replaced lost green space and encourages walking and cycling. It is over 30 per cent less polluted than walking along Euston Road. The route also takes people past the independent shops and restaurants on Drummond Street, helping to support these businesses.

Key achievements:

- On street improvements including greening, a green wall, a pollution-themed art installation and a new pocket park
- New signage for the cleaner route, including high profile position on Euston Road
- High profile Invisible Dust event with the Wellcome Trust
- Over 100 businesses engaged, 30 of which helped shape the scheme's design process
- Installation of a rapid charger in partnership with Camden council and TfL

3.9 Hammersmith BLEN (Hammersmith Council and Hammersmith BID)

The Hammersmith BLEN aimed to address air quality by changing business, employee, visitor and resident habits for the long-term and improving residents' health. New public realm was designed to provide a focal point for the community around the issue of air quality. The project also encouraged and supported businesses to reduce emissions from their own operations, particularly deliveries.

Key achievements:

- Planting 522m² of ivy screens along the most polluted section of Talgarth Road, directly underneath the flyover. The screens shield the public from exposure by providing a physical barrier and ensuring that people walk as far away from the kerbside as possible. This is supported with "Plants Not Pollution" signage painted onto Flyover piers. It uses an iconic William Morris design, which links to a wider anti-pollution awareness campaign
- Four rapid electric vehicle chargers installed
- An improved cycle lane
- A new clean air route created from Hammersmith station to Riverside

- The scheme won the Hammersmith Society Award for Improving the Local Environment and Best Healthy Streets Business Improvement District Project 2019
- Seventy businesses and almost 1,000 people were engaged at 14 events and workshops
- New secure cycle hub to provide much needed cycle parking for commuters
- The project proved extremely popular with the local community, with many residents asking for the BLEN to be extended throughout the area.
- Local businesses have been really interested in the project. As a result, five buildings including the Apollo and the Ark, have made changes to reduce their deliveries

70

businesses and almost 1,000 people were engaged at 14 events and workshops



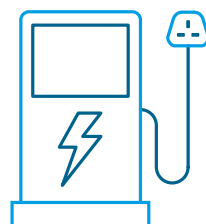
3.10 HOMERTON BLEN (Hackney Council with Homerton Hospital)

The project aimed to encourage Homerton Hospital staff, patients and visitors to use more sustainable transport modes by providing cycle and EV infrastructure and enhancing and increasing safety on walking routes to and from the hospital.

Key achievements:

- Better pedestrian environment between the hospital and Hackney Central and Homerton Station
- More cycle parking at the hospital
- Promoting walking, cycling and EVs through a Staff Travel Policy and Travel Hierarchy
- Electrification of Homerton Hospital fleet with replacement of four petrol vehicles
- Installing a network of EV charging points for use by the hospital, staff and visitors

Installing a network of EV charging points for use by the hospital, staff and visitors



3.11 THE NORTHBANK BLEN (Northbank Business Improvement District (BID) and Capco (Covent Garden area)

The Northbank area suffers from some of London's worst air quality which impacts on local workers, residents and visitors. Creating a healthier area is a priority for Northbank BID and its member businesses to ensure the local community and businesses thrive.

The Northbank BID is in the heart of London and is the gateway into London's West End, from Victoria Embankment and the Strand. The area has high footfall with very busy walking routes from transport links to places where people work and visit. It incorporates significant landmarks, visitor attractions, education and cultural institutions, theatres, hotels and is a major shopping destination.

The BLEN helped provide a focus for street greening to reduce pollution exposure and raise awareness of air pollution issues. It has made the area more attractive to walk and cycle and helped businesses to reduce their emissions.

The Northbank BID teamed up with Groundwork London to deliver the BLEN. It consisted of a series of green infrastructure measures, behaviour change campaigns, business engagement and delivery service planning.

Key achievements:

- A matrix of eight clean air streets with improved public space. This encourages walking, and walking on low exposure routes, between major interchanges and destinations in the area. It was supported with wayfinding and extensive promotion.
- A new parklet
- Some 376 businesses engaged with through 54 events and workshops, and 40 businesses provided with 1:1 support to establish how to reduce emissions. Example outcomes include a 12 per cent reduction in deliveries to Somerset House
- Some 26,800 people engaged with via pop up events, anti-idling events, wellbeing walks and air quality events hosted with large local businesses and organisations



The Northbank BLEN – Clean Air Routes

4. Other Air Quality Projects

4.1 ARCHWAY ZERO EMISSION NETWORK (ZEN) (Islington)

The Archway ZEN project worked with businesses, residents, schools and community groups to raise awareness of air pollution and help provide tailored practical solutions. The key aims were to achieve air quality improvements by changing:

- the way employees and residents commute
- modal shift to sustainable travel
- increasing the uptake of ultra-low emission vehicles
- assisting businesses to consolidate deliveries

Key achievements:

- Twenty NO₂ monitoring diffusion tubes were placed in the area. They have recorded an average reduction of 40ugm-3 over two years. It is not easy to quantify the ZEN's contribution to this huge drop. Other London-wide improvements, such as the upgrade of the bus fleet, will have played a role in these improvements. However, it is a very positive indicator of this project's success, the complementary Business Low Emission Neighbourhood (referred to earlier in this report), and other local and regional measures

- Installing the first publicly available electric charging points in the area, on Giesbach Road, St. John's Grove and Pemberton Gardens
- Putting in a range of small and medium-scale greening initiatives by local businesses and schools, including a new parklet. Green infrastructure proved a good way to get businesses to think about air quality in Archway and options on offer through the ZEN
- Adoption of cargo bikes for local deliveries, which is now reducing approximately 805 kilometres of petrol or diesel vehicle use per week
- Some 380 people had anti-idling and smarter driver training including drivers at Whittington Hospital, Metroline bus garage and Whittington cars minicabs
- Signing up 120 businesses to the ZEN, with 1000 individuals benefitting from ZEN services
- Forty events and workshops and bike repair events held

120

businesses signed-up to the ZEN, with 1000 individuals benefitting from ZEN services.





Clean Air Walk, Archway

4.2 ELECTRIC VEHICLE CHARGE POINT TRIAL AND BEAT THE STREETS (Hounslow)

This initiative had two strands – an innovative trial of electric vehicle chargers in lampposts, and the complementary Beat the Street. This promotional, game-based measure was designed to increase activity levels amongst participants both while playing and in the longer term. During the game, pupils and residents recorded how far they walked. They did this by tapping their Beat the Street cards on 'Beat Boxes' on lamp posts at various locations around the borough. Other objectives included:

- Boost levels of active travel on the school run
- Enhance levels of wellbeing and community cohesion.
- Increase the popularity of walking and cycling
- Reduce the use of cars for short journeys
- Improve air quality around schools

Key achievements for the EV charging project:

- 80 charge points installed into lampposts, creating charging capability without taking up pavement space or requiring dedicated parking space

- One fully electric street in the borough with chargers in every lamppost, due to demand from residents switching to cleaner vehicles

Key achievements Beat the Streets:

- Launch event attended by over 300 people
- Some 9,523 people took part in the scheme. Over 160,000 miles were logged. The highest participation levels (55 per cent total participants) were recorded in the most deprived areas
- There was a 4 per cent decrease in the in the proportion of adults reporting being inactive (immediately before the scheme to immediately after)
- The proportion of children doing 60 minutes of physical activity on five+ days in the past week increased from 56 to 64 per cent
- There was a 27 per cent average decrease in the number of cars arriving at schools. There was also a 12 per cent increase in the proportion walking to school
- Longer term changes were also recorded. For inactive people (0-1 days of physical activity) before Beat the Street in 2016, their average days of activity went up to 3.1 days, a year later

4.3 CLEAN AIR BETTER BUSINESS 11 (CABB 2)

Cross River Partnership

Clean Air Better Business brought together multiple central London boroughs and BIDs to enable business-led action to reduce emissions and exposure to air pollution. Key objectives were to empower businesses and BIDs to take positive action. This was particularly around business demand for freight and servicing, and in delivery of green infrastructure and healthy streets. The project:

- Helped put air quality firmly on the business agenda
- Supported 500+ businesses to reduce emissions from freight and servicing
- Reduced the impact of e-commerce deliveries
- Supported business-led green infrastructure and healthy streets
- Reduced exposure to air pollution
- Spread the word that clean air is better for business. The CABB has also helped to capacity-build partners and particularly the BID sector to help support the Mayor's air quality agenda. CABB piloted and trialled new and different ways to reduce emissions and exposure, with lessons learnt used to deliver wide-ranging actions

Key achievements:

- Identified and promoted 13 clean air walking routes across five boroughs, reducing exposure by between 30-60 per cent
- Commissioned and publicised research showing air pollutants are 30-60 per cent lower on side streets (clean air walking routes). Coverage in the Guardian led to more than 11,000 clean air route searches in just one day
- A 300 per cent increase in pedestrians using the clean air route between Euston and Kings Cross stations after the Wellbeing Walk was signposted
- Cut 1,162 deliveries a year through a shared supplier scheme. We worked with businesses to identify inefficiencies by developing the deliverBEST online tool and business support service. It provides businesses with relevant recommendations to make deliveries to their organisations more efficient. Recommendations are tailored to an organisation based on factors including size, location and sector.
- Some 38 trees, 40 square meters of rain garden, and nine other greening measures delivered. These include a parklet in Fitzrovia, which has led to a 41 per cent increase in recorded feelings of wellbeing for pedestrians using the area

- Some 97 events and workshops
- Three awards won and runner up/ finalist for seven other awards
- Around 22,000 users of the 'Click. Collect. Clean Air' tool. This was developed to change behaviour and encourage the use of 'click & collect' for online shopping purchases. The website www.clickcollect.london (and various locally-branded versions) maps collection points across London and the UK. This makes it easy to find a convenient collection point
- Some 140,000 users of the Clean Air Route Finder we designed to help people find cleaner walking and cycling routes
- The Heart of London Deliveries, Waste & Recycling Action Plan (launched as HOLBA Clean Air Initiatives in May 2017). CRP, on behalf of Heart of London. The aim was to minimise waste and reduce waste vehicle collection trips

500+

businesses supported to reduce emissions from freight and servicing



22,000

users of the 'Click. Collect. Clean Air' tool. This was developed to change behaviour and encourage the use of 'click & collect' for online shopping purchases



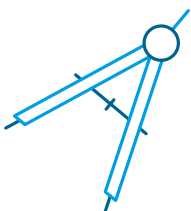
4.4 EVELYN STREET CONSTRUCTION LOGISTICS PLAN FRAMEWORK (Lewisham)

This project aimed to coordinate the construction logistics from the planned redevelopment of Deptford to reduce the impact of the additional construction vehicles. The emphasis was on vehicle emissions and their contribution to poor air quality for people living in the Evelyn Street Area. Ten of the biggest construction companies in the area take part in the scheme. However, several major developments have been delayed, which have limited the project's impact. Lewisham plans to keep the project in place so that the anticipated benefits can be realised over the coming years.

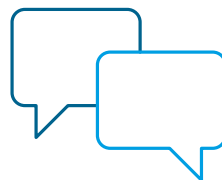
Key achievements:

- Detailed transport and logistics plans put in place with sites, to reducing construction traffic including removing peak deliveries, reduce workforce passenger car travel
- NRMM usage was reduced through the usage of mains power at Deptford Foundry
- Introduction of local AQ monitoring at Timberyard, funded by the developers
- Relationship building between individual sites and infrastructure projects (Cycleway 4) to reduce conflict during concurrent construction, reducing congestion and delays
- There is now a forum in place for the new and largest sites once they begin the development (Convoys Wharf, Neptune's Wharf, New Bermondsey)

Detailed transport and logistics plans put in place with sites, to reduce construction traffic including removing peak deliveries, reducing workforce passenger car travel



There is now a forum in place for the new and largest sites once they begin the development (Convoys Wharf, Neptune's Wharf, New Bermondsey)



4.5 FREIGHT CONSOLIDATION SERVICE (Camden and Islington)

The Camden consolidation centre is a facility that takes hundreds of different deliveries from various suppliers, and channels them into one central point. The supplies, goods and materials are then sorted into fewer – and electric – vehicles for delivery, on a just-in-time basis. The project is delivering to over 135 buildings across Camden and Islington.

Key achievements:

- Some 43,686 parcels delivered from August 2018 to July 2019. This has helped save:
 - 21,743vkms
 - 6.9 Tonnes carbon / 6944kg
 - 40.66 Tonnes NO2
- Camden have seen a 57 per cent reduction in delivery trips and 66 per cent drop in delivery miles since they started the Consolidation Centre

4.6 ZERO EMISSION DELIVERIES – ZED (Waltham Forest)

With support from the MAQF, Waltham Forest became the first UK council to support introduction of a zero emissions delivery service: ZED Waltham Forest. This service targets local businesses and first and last mile deliveries. It uses cargo bikes, trikes, and electric vehicles to courier goods from shops and suppliers within the borough and beyond.

The service gives residents and businesses a chance to support their local economy and improves air quality. It encourages people to leave their vehicles at home and instead walk, cycle and use public transport, using the borough's new local transport infrastructure. This new and high-quality service in Waltham Forest is now being well used by a range of local businesses, both within the borough and beyond. The council is now using ZED for library deliveries, to move musical instruments for tuition classes and to deliver materials to schools.

Key achievements:

In the first 18 months of the project, the team has:

- Delivered 21,979 packages
- Travelled 21,248km
- Provided a delivery service for 55 local businesses
- Partnership working - ZED also works with Zedify in central London to create a network of sustainable deliveries. One of their clients, Organiclea, who are based in north Chingford, use this service to deliver to restaurants in central London. ZED collects the fresh fruit and vegetable boxes in their electric van and hands them over to Zedify's depot in Smithfield Market, for onward delivery by bike. This means the whole journey is ultra-low emission
- Employment – ZED is one of only six London Living Wage employers in Waltham Forest and is therefore providing a decent wage for 12 local people. They are paid by hour worked, not by the number of deliveries that they make. This means they are not under pressure to deliver and can instead provide a high-quality service
- Innovation – Waltham Forest not only supports zero emission deliveries, it has also used new approaches to solve logistical issues and meet business needs. They have a fleet of ten cargo bikes; two Icen trikes, two Omnium cargo bikes, three Urban Arrow cargo bikes, a Bullitt Alu bike, a Bullitt Convoy bike and an e-bike, alongside a branded Nissan e-NV200 van. By using such a wide range of bikes, they can meet the needs of all businesses. The council now wants to buy a trailer which will turn into a mobile consolidation hub, the first of its kind in the UK

4.7 HACKNEY FLEET PROJECT (Hackney)

Hackney Council has ambitions to have the cleanest and greenest fleet in London and one of the cleanest and greenest fleets in the UK. This project aimed to show how local authorities can rapidly increase uptake of electric vehicles, as well as increase walking and cycling for work trips.

Key achievements:

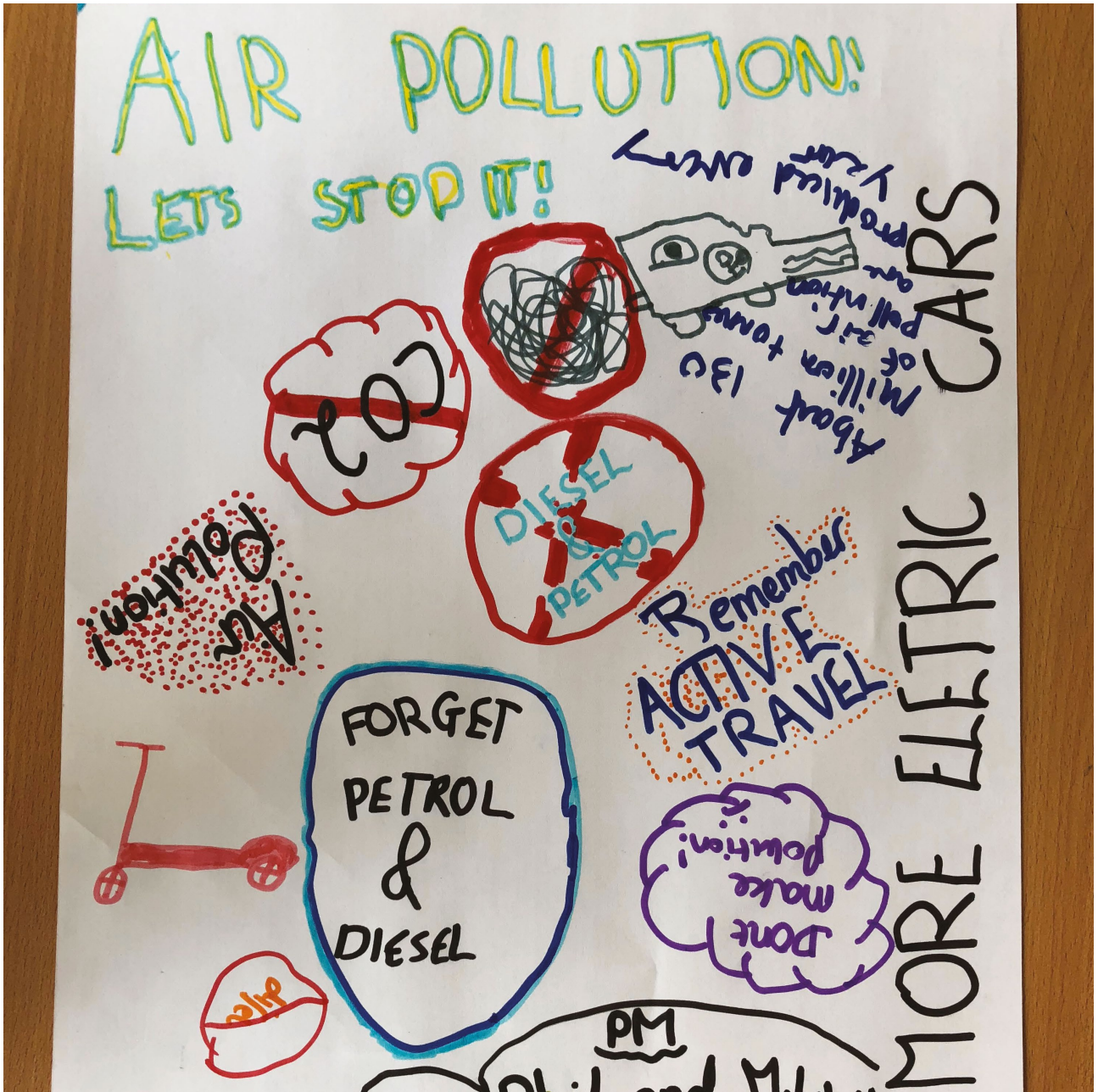
- Winner of the Fleet Category at the 2018 National Air Quality Awards
- Installed 45 charging points of 7 KW or more on council car parks and depots
- Procured 39 electric vehicles – bringing the total electric vehicle fleet to 55 vehicles
- Have successfully trailed home charging using Ubitricity's smart lead and charging equipment with five Hackney staff members officers. A first for London and one of first in UK
- Increased the council owned bike fleet by 30 and launched an innovative pool bike solution for council business travel. The council has in addition delivered various internal campaigns to increase bike use by Council employees

4.8 HAMMERSMITH GROVE SCHEME (Hammersmith & Fulham)

To turn the street from a traffic-dominated rat-run with planting, seating, cycling facilities, reduced traffic lanes, entry treatments and EV charging points.

Key achievements:

- Introduced a large variety of plants, plus four parklets with seating and cycling facilities
- Delivered four fast multi-point charging points and bays, removing eight out of 12 P&D parking bays overall
- Changed the road to one-way, narrowing the lanes and entries, and providing a contra-flow cycle lane and bike-port
- Held a very successful car free day to promote the scheme
- Won three awards for the scheme (Healthy Streets Award; the Hammersmith Society's prestigious Nancye Goulden Award; and Silver Award at Global Good Awards 2019)
- An AQ mesh monitor was placed in the area to provide before and after data. It recorded an average reduction of 25 per cent in the annual mean Nitrogen Dioxide concentrations (pre- monitoring took place between March and July 2018, and post-monitoring between January and September 2019)



4.9 HARINGEY NO 2 NO2 PROGRAMME

Haringey's 'No 2 NO2' Programme is a package of linked measures to improve local air quality and reduce emissions through awareness raising and behaviour change.

Key achievements:

- Haringey's first school street – which delivered timed road closures at the entrance to Lordship Primary
- Some 6,376 Personal Travel Plans developed to help parents and carers get to school in non- polluting ways and expose children to less pollution
- The setting up of 12 Walking Zones for those schools that experience high car use and are in / adjacent NO2 affected areas. A walking zone aims to discourage cars in favour of travel by foot
- Some 472 people had cycle skills training and 240 people had cycle maintenance training
- An air quality business engagement project focussed in the Wood Green area, developing business-focused action plans with 59 businesses
- Engagement work with those with asthma, COPD, heart disease, stroke etc to raise awareness of air pollution. Promotion of walkit.com / airtex by means of an 'information pack' via GP surgeries, local medical centres and pharmacies, engaging directly with patients

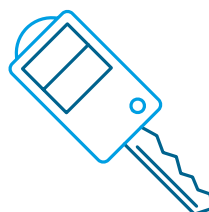
4.10 IDLING ACTION (City of London lead borough)

This project brought together BIDs, boroughs, businesses, and other stakeholders to deliver idling awareness across the 19 participating boroughs. The project recruited and trained volunteers to engage with drivers about the impacts of engine idling on Idling Action Days.

The aims of the campaign were to:

- Reduce unnecessary engine idling
- Raise the profile of air quality; and of idling engines as a source of air pollution
- Get the support of local communities, businesses and organisations to help with campaign days
- Speak to drivers to educate and encourage behaviour change
- Gain maximum publicity for the campaign across London

One of the aims of the campaign was to speak to drivers to educate and encourage behaviour change



Key achievements:

- Delivered 161 events and interacted face to face with over 7,200 members of the public
- Over 750 toolkits were downloaded from people across the UK – the campaign materials have been particularly popular
- Delivered educational sessions for around 15,000 primary school students
- Publicised the campaign through a Twitter account with over 1,400 followers; over 13,000 website views, and many website enquiries

Using Round 3 of MAQF funding, this project is now being expanded to benefit all but one London borough (Barnet have chosen not to take part). All the boroughs are now complementing the expanded project with enforcement against idling vehicles.

4.11 THE LONDON LOW EMISSION CONSTRUCTION PARTNERSHIP (LLECP) (Camden)

LLECP was a partnership project with the Environmental Research Group (ERG) at King's College London, and six boroughs. Through the project ERG worked with the construction industry and supply chains to reduce the overall pollution of their activities. It involved a combination of scientific study and on-the-ground work directly with construction companies and construction sites.

Key achievements:

- Helped the construction industry to understand its impact on local air quality. This was achieved by running seminars and workshops at City Hall and speaking at industry events. Examples include BuildLondon, EcoBuild, Construction Plant Hire Association annual conference, Highways England NRMM user group and the Environmental Industries Commission. We also engaged directly with developers and their contractors as well as through the website and social media accounts
- Worked with established industry bodies to develop guidance and training materials. These included the Institute for Civil Engineers (ICE) – Engineering cleaner air report, Considerate Constructors Scheme (CCS)

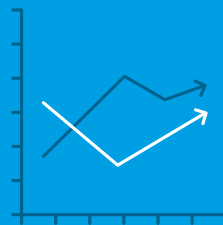
- Reached 500 businesses through the industry engagement campaign
- LLECP wrote several articles for national papers and industry publications. It also appeared on regional BBC news to discuss the GLA's control of construction emissions in London
- Training event for boroughs and stakeholders at City Hall
- Improved pollution monitoring, and made this data available for construction sites in London. Dust monitoring is often a planning requirement for major development sites. LLECP improved this by developing guidance on how and where to locate indicative monitors and how to operate them to improve data quality. The project also provided a real-time pollution measurement platform on the project website. It included a rapid alert system to notify the site managers when there was a pollution event likely to have been linked to construction activity.
- Assessed the impact of pollution abatement techniques using high quality on-site measurement and specialist data analysis. This allowed LLECP to independently assess the potential to reduce emissions using hybrid machines, chemical dust suppression, diesel fuel additives and ISO grade fuels
- Sponsored a PhD thesis 'Characterising non-road mobile machinery emissions through

500

businesses reached through the industry engagement campaign



Improved pollution monitoring, and made this data available for construction sites in London.



portable emissions testing and emissions inventory development'. This work has been presented at UK and international events such as the Royal Society of Chemistry, Cambridge Particle meeting, Public Health England and the Co-ordinating Research Council (US)

- Created guidance on dust and emissions from construction sites for use by local authorities, developers and contractors with key LLECP project findings
- Worked with targeted construction sites to provide advice and guidance on how to apply 'best in class' abatement. This included major London infrastructure projects (HS2/ Tideway) plus regeneration areas including Battersea, Deptford, Earls Court, Elephant and Castle, King's Cross, Nine Elms and Stratford
- Launched a dedicated website containing information on the air pollution impacts from the construction industry and the available abatement measures. Between April 2016 – April 2019 the website had 12,597 unique users with 26,776-page views
- LLECP also worked with Aggreko and Green Urban Technologies to develop and test SCRT retrofit (after-exhaust technology) to reduce both nitrogen dioxide and particulates. The aim was to allow constant speed engines to meet the GLA emission standards required in central London from 2020. Retrofitting existing machines is potentially the fastest way of achieving the emission reduction targets due to supply shortages of new stage V generators

4.12 NON-ROAD MOBILE MACHINERY (NRMM) – SOUTH LONDON (Merton lead borough)

NRMM (primarily construction machinery) contributes to around 15 per cent of PM2.5 pollution in London. The NRMM project was originally intended to cover only the south London boroughs. However, following repeated requests, it widened to incorporate more councils, bringing the total taking part to 13. Membership included the provision of training and expertise, and the carrying out of audits of NRMM at construction sites. Audits included extensive engagement with construction site managers to help them understand and comply with London's NRMM requirements. It also included follow up visits to sites to check how their equipment and practices have improved.

Key achievements:

- Audited 464 sites and 1,444 machines
- A 40 per cent average increase in compliance rates between the first and second construction site audits
- Some 16.5 tonnes of PM and 297 tonnes of NOx cut (31 per cent and 22 per cent respectively) across all sites visited
- Six boroughs and five industry representatives received detailed training on reducing NRMM
- Due to the success of this project, in Round 3 of the MAQF it has been expanded to include every London borough

4.13 NON-ROAD MOBILE MACHINERY (NRMM) – NORTH LONDON (Barnet lead borough)

The project employed an officer to audit construction sites for compliance with the Non-Road Mobile Machinery (NRMM) regulations. It aimed to reduce NO2 and PM10 emissions from NRMM and raise industry awareness of NRMM requirements, air pollution, dust and the GLA's SPG. Another objective was to create a legacy Code of Practice for north London. This would shape local policy and ensure a consistent approach to enforcement. It also acts as a guide to help developers reduce emissions and reduce nuisance complaints.

Key achievements:

- The officer was able to proactively counter complaints of dust and track-out onto road from construction sites by assessing "Construction Method Statement" planning conditions
- The requirement to register NRMM on the website, and for it to comply with NRMM Regulations has been formalised. There are now standard planning conditions and it has been incorporated into the participating councils' Supplementary Planning Guidance
- Increase in compliance rates on major construction sites



In Round 3 of the MAQF this project has now been replaced by the London-wide scheme led by Merton, leading to economies of scale and a joined-up approach across London.

4.14 PUTNEY HIGH STREET AIR QUALITY SCHEME (Wandsworth)

This small-scale project identified and assessed potential measures on Putney High Street which could be rolled out within larger workstreams. This project developed detailed proposals to reduce transport related emissions and make the high street safer, more functional, and more attractive.

Key achievements:

- Completion of detailed design of the main environmental improvement scheme on Putney High Street which will enhance the pedestrian and cycle environment, and help to ensure the 20mph speed limit is adhered to. The MAQF enabled the development of the detailed designs, which unlocked match funding to deliver the scheme, which will be complete in 2020.
- Design and negotiation of two new green walls (to be delivered in 2020)

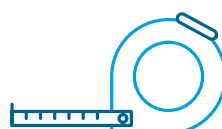
4.15 REDBRIDGE SCHOOLS AIR ACTION PROGRAMME (Redbridge)

The project worked with 15 schools to deliver a comprehensive and holistic air quality education programme. It supported students to lead on behaviour change activities, citizen science and campaigns. The programme aimed to:

- Make the school and local community aware of the risks of air pollution
- Inform schools about the strategies that they can use to protect their health and reduce their own impact
- Reduce the level of car use at each school

4,190

vehicle kilometres reduced per day as a result of the project (based on before and after surveys, 550 people switched from using their car to walking and cycling)

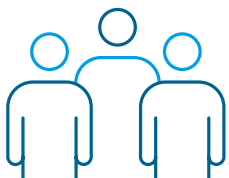


Key achievements:

- Some 4,190 vehicle kilometres reduced per day as a result of the project (based on before and after surveys, 550 people switched from using their car to walking and cycling)
- Holding 232 workshops and events, reaching almost 29,000 students, parents and staff
- Around 1,658 local households received an air quality protection strategy and pledge flyer. Of these, 784 were engaged in either an air quality brief conversation or a Personal Travel Plan
- Four out of six schools increased their level of STARS (Sustainable Travel: Active, Responsible, Safe) accreditation. Three of these achieved gold from a baseline of two bronze and one silver in the previous year
- Redbridge Primary's outstanding Ofsted report specifically referred to the excellence of programme

4.16 SHOREDITCH ZERO EMISSIONS NETWORK (ZEN) – (Hackney lead)

Zero Emissions Network (ZEN) is a business liaison and behaviour change project based in east London with a transferable model for tackling air pollution. It is managed jointly by the London boroughs of Hackney, Islington and Tower Hamlets. The project was established in Hackney in 2012. Since 2013, it has been funded by MAQF Rounds 1 and 2. ZEN works with businesses and residents offering bespoke free advice and services to help them work cheaper, cleaner and greener. It also works with moped delivery riders to encourage the switch from mopeds to e-bikes. ZEN shows that air quality is a cross boundary issue that can be effectively addressed through collaborative working.

232**workshops and events, reaching almost 29,000 students, parents and staff**



Ultra Low Emission Street

Key achievements:

- Over 440 businesses joined the network, bringing the total to 1,297 business members and 719 households
- Over 800 measures were undertaken by businesses and 465 by residents
- The project was recognised as best practice in Defra's National Clean Air Strategy 2019. It was shortlisted for the Most Innovative Transport Project at the 2018 London Transport Awards
- Creation of a high quality, nationally applicable guide for fleet managers switching from mopeds to e-bikes. This will remove a major barrier preventing larger businesses switching to e-bikes by providing in-depth detailed information about e-bikes. In addition, 11 moped riders switched from mopeds to e-bikes
- Over 1,800 households were targeted in a programme of Personalised Travel Planning, as part of the roll-out of the residential element of ZEN. This included producing bespoke travel awareness materials and the recruitment of over 400 households to the network
- The annual ZEN networking event has grown in popularity and continued to raise the profile of businesses' role in improving air quality. Over 210 business representatives attended the most recent event in November 2018

4.17 SOUTH LONDON LOW EMISSION LOGISTICS STUDY (Lambeth lead borough)

Lambeth Council, working with Southwark, Wandsworth and Croydon, carried out this feasibility study to look at how to consolidate deliveries using soft measures. These include reduced frequency and sharing suppliers. It also looked at whether a consolidation centre for borough and business use was feasible and what improvements in air quality would be achieved.

The study concluded that a consolidation centre was not viable. However, it recommended a range of measures councils could take to reduce the number of deliveries they received.

Key achievements:

- Feasibility study published
- Procurement guide completed to embed procurement practices that reduce deliveries and prioritise cleaner vehicles
- Considerable reduction in deliveries across the boroughs. For example, Lambeth moved to Digimail which means post is now electronically collected from and delivered to council offices. Outgoing mail is emailed to a central location to be printed and posted out, and incoming mail is scanned directly to officers

4.18 SPECIFICATION FOR USE OF STANDBY GENERATORS (City of London and City of Westminster)

There are many standby diesel generators in central London. These are increasingly being switched on in order to provide additional electricity to the grid. This is due to the National Grid's Short-Term Operating Reserve (STOR) scheme which pays companies for the additional electricity generated from standby generators.

City of London Corporation and Westminster Council carried out this study to understand the potential air quality impact of emissions from this increased activity. It provided a strong evidence base to support strategic decision making in relation to stand-by generators. In addition, it made several recommendations for measures to mitigate air quality impacts.

Air quality modelling was undertaken for representative generator types and sizes individually and in through indicative borough-wide modelling. It showed that more use of stand-by generators in STOR and triad management without policy or regulation would have negative air quality impacts.

Building on these findings, the project put forward recommendations to reduce the air quality impact of increased STOR and Triad activity by stand-by generators.

Some of which were:

- **Engine specifications:** Stand-by generators wanting to participate in STOR should install diesel engines that meet Euro Stage V standards or gas engines. These equate to a NO_x emission rate of 0.6 g/kWh
- **Existing installations:** Existing stand-by generators which do not meet Euro Stage V standards or have gas engines installed should not participate in STOR or triad management. Their use should be restricted to stand-by, emergency and life support activities, including testing
- **Release environment:** Stand-by generators should submit an air quality impact assessment to the local planning authority. This should demonstrate that the release environment and stack design will not result in adverse air quality impacts prior to participating in STOR. It should cover both nitrogen dioxide and PM₁₀, and use the IAQM/EPUK 2017 guidelines²⁶ to describe and assess impacts
- **Data Collection:** London should develop a better understanding of existing stand-by generators, including capacity, emissions

4.19 SUTTON TOWN CENTRE PERMEABILITY AND ACCESS IMPROVEMENTS

(Sutton)

The project delivered improved walking and cycling routes and accessibility into the town centre. It also included measures to reduce emissions from vehicles using parking policy, business engagement and improved infrastructure. This was complemented by installing green infrastructure to improve public space for walking and help reduce exposure to air pollution.

Key achievements:

- Improvements to three routes into the town centre to promote access by bike or on foot
- Public realm improvements including wider footways, landscaping, lighting, seating, signage, trees, improved crossings and bus stop improvements
- A cycle hire scheme
- Some 124 square meters of living wall along a school boundary

- A series of business engagement events to promote the adoption of emissions reduction measures
- Installation of several signs asking drivers to switch off their engines alongside an awareness-raising event
- Seventy-six cycle parking spaces
- Thirty-four publicly accessible charging points for electric vehicles
- Two new Car Club bays
- Some 295 people had cycle training
- Thirty events and workshops for residents and businesses

5. Conclusion and next steps

This report highlights the wide range of air quality projects delivered by boroughs and BIDs. They include everything from awareness raising and engagement to major public realm initiatives.

MAQF Round 2 funded London's first five LENSs, which were then followed by six Business LENSs that commenced in 2018. The fund has enabled a range of trials, such as the diesel surcharge on metered parking at the Marylebone LEN in Westminster, the electric bicycle trial scheme in Greenwich, and the zero emission delivery service in Waltham Forest. All of these trials have subsequently been rolled out to cover the whole of the respective boroughs.

But with any fund of this scale, some projects – especially the most innovative and complex ones – have been more challenging, and for the Ilford LEN, these challenges have led to a delay in delivering the scheme. However, a glance at some of the outcomes – such as 297 tonnes of NO_x cut at construction sites, and the delivery of 26 new clean air routes, nearly 350 electric vehicle chargers and almost a thousand new cycle parking stands - shows the impact these schemes can have. They are making a real and positive difference to Londoners' lives.

Due to the success of the pilot Business LENSs, in 2019 a further £6m was allocated to support more business-focused air quality projects through the London Economic Action Partnership. £2m of this has been allocated for more BLENs and £4m for an air quality-themed strand of the Good Growth regeneration fund. At the time of writing, the locations/projects to benefit from this funding had not yet been selected.

London boroughs have a critical role to play in the fight for cleaner air, yet they receive very little funding from central Government and London has been excluded from the Government's national £220million Clean Air Fund. That is why the Mayor is determined to continue to support local action and innovation through his Air Quality Fund and to continue to lobby Government to provide us with the powers and resources London needs to tackle our toxic air.

Round 3 of the MAQF will provide £6 million to air quality projects delivered by London's councils, and was announced in July 2019. The projects benefiting from funding are:

- **Camden Town LEN, Camden –** includes trial closures of the High Street during summer and Christmas, a low emission route to the market and upgraded walking and cycling routes

-
- **Becontree Heath LEN, Barking and Dagenham** – includes traffic calming, road closures, and trial schemes to allow only cyclists, and pedestrians to use certain streets. It also includes new pocket places (underused areas of public space that will be improved with planting/seating/art) and encouraging 'pop up' use underused spaces.
 - **Stoke Newington Church Street LEN, Hackney** – includes ambitious public realm improvements on the High Street, alongside support for cycling, walking and electric vehicles. The project will also consider a range of options for reducing polluting vehicles on Church Street, in consultation with local people.
 - **Walworth Road LEN, Southwark** – includes measures to stop rat running, a new community space and pocket park; as well as new charging facilities for EVs.
 - **Zero Emission Zone (ZEZ)** – a scheme to restrict access to the cleanest vehicles in the "City Cluster", the densely populated and heavily developed eastern corner of the City of London
 - **Redbridge School Streets** – timed road closures outside five schools in Redbridge to reduce students' exposure to pollution, increase safety, and encourage walking to school

"The Mayor is determined to continue to support local action and innovation through his Air Quality Fund and to continue to lobby Government to provide us with the powers and resources London needs to tackle our toxic air."

- **Camden Cargo Bike Network** – a programme of extended loans of cargo bikes to help businesses make the switch from polluting vehicles wherever possible
- **Idling Action** – a project to act on idling (including enforcement), spanning 27 boroughs
- **Clean Air Thames** – a project to retrofit 11 river vessels, including tugs and passenger transport, cutting their emissions by up to 90 per cent
- **South London Construction Consolidation Centre** – an initiative to consolidate construction deliveries across six south London boroughs to stop at least 150 construction vehicle movements per day
- **Non-Road Mobile Machinery Zone enforcement** – a pan-London project to inspect construction sites in every borough to ensure they are using the cleanest construction equipment
- **Healthy Streets Everyday** – a project spanning 16 boroughs, which will deliver 250 car-free and pedestrianisation initiatives or events over three years
- **Zero Emissions Network (ZEN) Phase 3** – establishing ZENs in Hackney, Islington and Tower Hamlets. ZENs provide support, advice, events and small grants to help businesses reduce their emissions
- **Hammersmith Zero Emissions Network** – support for businesses to switch to zero/low emission vehicles in Hammersmith
- **Enhanced street cleaning to cut particulate matter (PM2.5) pollution** – tackling highly polluted streets and pollution hotspots by investigating how street cleaning techniques can be used to improve air quality.

We will publish a report on the outcomes from these projects in 2022.



Westminster Kingsway, Pocket Park

MAYOR OF LONDON

