MAYOR OF LONDON

Mayor's Air Quality Fund Completion Report

ROUND 3

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Cover Image:
Healthy Streets Everyday parklet delivered by Westminster City Council with support from Northbank BID
Photo credit courtesy of Cross River Partnership.

Contents

INTRODUCTION

The Mayor is committed to cleaning up London's air. He is delivering hard-hitting measures to reduce air pollution and protect public health, including:

- **the world's first and largest Ultra Low Emission Zone (ULEZ) which now covers all of London**
- **investing in a growing electric bus fleet and phasing out diesel busses, the largest electric bus fleet in Europe**
- **the Non-Road Mobile Machinery Low emission zone, which is slashing emissions from construction machinery by over a third.**

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. This includes delivering against an up-to-date statutory local Air Quality Action Plan.

The Mayor's Air Quality Fund (MAQF) is designed to help boroughs trial and deliver local measures to reduce pollution and exposure to it. The aim is to share learnings and outcomes with each other. This includes 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:

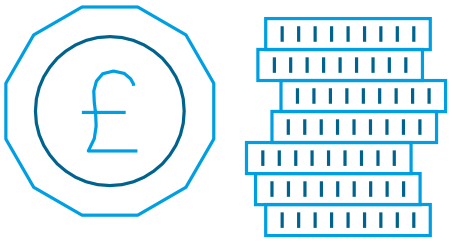
- support boroughs to reduce PM and NO2 concentrations across London
- support projects that will help to deliver against some of the Mayor's key priorities
- maximise investment by securing match funding from boroughs and other sources
- provide a clear understanding of the impact of different measures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

The funding is linked to the LLAQM, with key actions from the LLAQM guidance prioritised for funding. To date, MAQF has provided boroughs with £22m funding in total over ten years. This is split into three funding rounds for projects typically lasting for three years.

The third round of the MAQF allocated £6m between April 2019-2022.

The Mayor also provided £1.7m (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). He also provided a further £3.5m through the Good Growth Fund (GGF), a £70m regeneration programme to support growth and community development in London. This has funded four standalone air quality projects and provided additional air quality and active travel improvements to six major regeneration schemes.

All the MAQF projects, BLENs and GGF 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.**



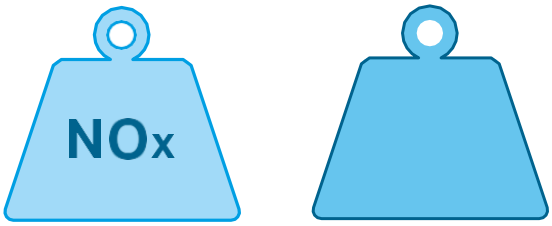
Round 3 of the MAQF took place between 2019 and 2022, which meant the delivery phase happened during the COVID-19 pandemic. This significantly impacted the scope and delivery of several projects as well as resourcing due to several local authorities redeploying staff. Many projects were able to adapt and deliver admirably during this time (the NRMM project for example, switched to virtual site inspections). However, some projects – especially those which relied heavily on engagement with the private sector – had to be scaled down.

This report summarises the outcomes of projects from round three of the MAQF, the six Business Low Emission Neighbourhoods and the four stand-alone air quality Good Growth Fund projects.

Key highlights

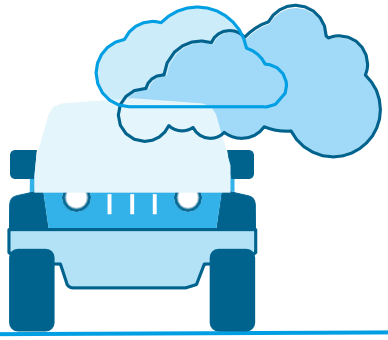
42%

PM and 35.6% NOx emissions reduction from NRMM at London construction sites annually.



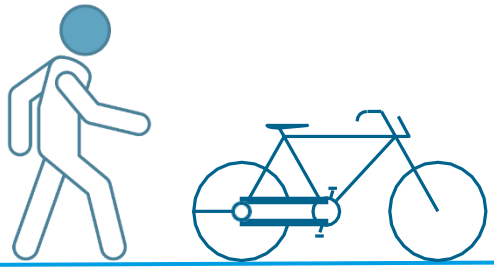
15%

reduction in car journeys in the Walworth Low Emission Neighbourhood



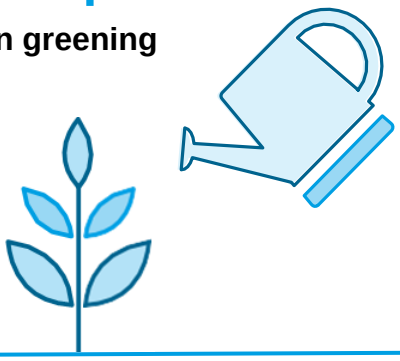
123

grants or loans given to small businesses for active travel improvements



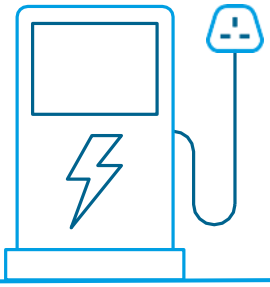
330sq.m

of urban greening



43

EV charging points installed



87,755

residents engaged

3,485

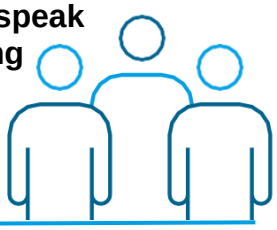
businesses engaged

132

engagement events held

693

volunteers trained to speak to drivers on anti-idling



Key highlights

83
school streets delivered

88
cycle storage spaces installed

1,209
residents given cycle training

5.2km
of new or improved cycle infrastructure delivered

IDLING ACTION PROJECT

Multi-borough project, led by London Borough of Camden, City of London Corporation

The Idling Action Project was a London-wide behaviour change campaign involving 31 London boroughs. It helped to cut localised air pollution caused from motorists leaving their engines running when parked.

The project's objectives were to:

- reduce unnecessary idling and raise awareness of idling engines as a source of air pollution and its impact on health.
- gain the support of local communities, schools, businesses and other organisations in changing their behaviours.
- speak to drivers to educate and encourage behaviour change.
- attract maximum publicity for the campaign across London.

Key achievements:

- Over 300 workshops delivered, engaging more than 17,000 KS2 students on air quality.
- Some 206 Idling Action banners designed by pupils, printed and provided to the schools.
- A pan-London advertising campaign with an estimated reach of 24 million. This campaign used a variety of media including billboards, bus rears, petrol pumps, radio adverts, digital ads and social media.
- Some 112 idling action events interacting with 1,808 drivers.
- A total of 693 volunteers trained to speak to drivers confidentially about air pollution, health, and idling. When asked by volunteers, 85 per cent of idling drivers switched off their engine.
- Delivered a fleet training programme, with 49 businesses receiving training.
- Maintained and upgraded the project website to act as an ongoing legacy information hub for sharing project resources. These resources have been used not only by London's boroughs but also by Authorities across the country.
- Part of the project included ensuring all boroughs committed to enforcing against idling vehicles. To enable this, they hosted four borough Enforcement Officer workshops and supported all participating boroughs with adopting idling enforcement powers.
- Gained large amounts of press coverage for the project with an estimated 106 articles.

693 volunteers
trained to speak to drivers on anti-idling.

HEALTHY STREETS EVERYDAY

Cross River Partnership-led project with 17 borough partners

The Healthy Streets Everyday project empowered boroughs, businesses, and communities across London to deliver pedestrian-priority healthy streets. This helped to increase walking rates and reduce emissions and exposure to toxic air.

The project's objectives were to:

- improve streetscape to make streets more pedestrian-friendly and improve air quality.
- encourage active travel and car free behaviour.
- develop guidance on healthy streets and best-practice documents.

Key achievements:

- Permanent streetscape improvements at more than 12 locations across 11 boroughs to make streets more pedestrian-friendly and improve air quality.
- Eight parklets installed, 260m2 greening delivered, 680m2 of new public realm created.
- Boosting cycling infrastructure including 16 standard cycle parking spaces, one secure cycle storage unit, and two cycle lane improvements
- 91 Dr Bike events helping 1,209 people with cycle maintenance support and training.
- New traffic regulations put in place at over 40 locations across six boroughs, making streets more pedestrian-friendly and improving air quality.
- 76 school streets delivered across 8 boroughs as well as 19 lunchtime streets.
- Over 76,000 people directly engaged on Healthy Streets initiatives.
- Delivery of a dedicated HSE website and several social media campaigns. The programme has also supported partners through producing social media assets boroughs and community groups can adapt for use locally.
- Supported the International Car Free Day London Summit in 2019 and 2020.
- Developed guidance on several key themes including greening, monitoring and accessibility. This includes both public-facing case studies and workshops, and detailed best-practice documents and seminars for borough transport and air quality officers.

76 school streets and 19 lunchtime streets

Delivered across 8 boroughs to improve air quality around schools.

PAN LONDON NON-ROAD MOBILE MACHINERY ZONE ENFORCEMENT PROJECT

London Borough of Merton led project involving 32 boroughs

The pan-London NRMM project engages and guides the construction industry through education, awareness, and audits of site machinery. It ensures that the most polluting NRMM is removed from sites.

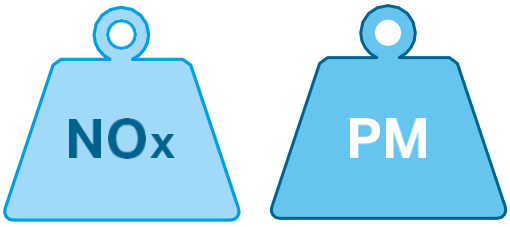
The project's objectives were to:

- engage major construction sites across London and support sites to reach compliance status.
- produce industry guidance to support the construction industry to meet the NRMM emission. standards set by GLA policy
- engage the industry through presentations on NRMM and best practice.

Key achievements:

- Over 2,000 site audits carried out.
- Compliance rate up by 52 per cent through engagement and auditing.
- Yearly emissions savings of 41.66 per cent of PM and 35.6 per cent of NOx against a no action baseline for emissions from NRMM.
- Published four NRMM Practical Guidance Documents to help the construction industry to meet NRMM LEZ policy standards.
- Published a Construction Code of Practice for London boroughs. This provides the construction industry with a consistent and up-to-date set of expectations.
- Developed and rolled out a certification scheme. This created an additional feature in the environmental portfolio of organisations when tendering and increasing air quality communications in local neighbourhoods.
- Engaged with over eight generator suppliers and four depots to understand the fleet profile to ensure exemption decision-making is evidence-led.

42% PM and 35.6% NOx emissions reduction
from NRMM at construction sites annually.



CLEAN AIR THAMES

Cross River Partnership led project with the City of London Corporation and the Port of London Authority.

Clean Air Thames was designed to reduce emissions from inland vessels operating on the Thames within Greater London.

It aimed to tangibly improve air quality on the Thames by retrofitting vessels with Selective Catalytic Reductions (SCR) technology. This was to reduce exhaust emissions from the vessels.

The project's objectives were to:

- encourage and enable vessel operators to retrofit their vessels when they might not have considered it before.
- reduce marine emissions of primary pollutants including nitrogen oxides (NOx), sulphate oxides (SOx), particulate matter (PM), and volatile organic compounds (VOC).
- serve as a case study for various stakeholders considering the challenges and benefits of greening vessels on the Thames.

Key achievements:

- Two marine vessels were retrofitted with Selective Catalytic Reductions (SCR) technology to reduce their exhaust emissions.
- Completed pre- and post- emission analysis on the vessels to understand the benefits of SCR technology.
- NOx emission reductions were noted for SCR fitted vessels with increasing speed. This was in contrast to rising NOx levels with increasing engine speed pre-retrofit.
- Levels of CO, THC and PM were found to be appreciably lower post-retrofit, especially so at the highest speed condition.

Two marine vessels retrofitted
to reduce emissions on the river Thames

Clean Air Thames

STREET CLEANSING TO REDUCE RE-SUSPENDED PARTICULATES

London Borough of Lambeth
London Borough of Southwark
Imperial College London

The Street Cleansing project looked at how effective different street cleansing equipment and methodologies were at removing particulate matter (PM10) from road surfaces.

The project's objectives were to:

- test the effectiveness of different street cleansing equipment.
- review methodologies available in removing particulate matter (PM10) from road surfaces.
- produce guidance for local authorities on the most effective street cleansing options to reduce re-suspended particulate matter pollution.
- understand the urban sources of PM10 particulates on road surfaces.

Key achievements:

- Production of a literature review on available street sweeping technologies, considering whether better technologies or sweeping practice were best for reducing particulate matter in the air. The literature review found no clear evidence on the impact on PM10.
- Delivered a trial comparing old and new street sweepers. This indicated that old sweepers showed an increase in additional PM concentrations during sweeping, compared with new sweepers.
- Provided a report to help inform borough street sweeping strategies.

Innovative research on street cleansing equipment and methodology indicating reduced PM emissions with new street sweepers.

CAMDEN CARGO BIKE NETWORK

London Borough of Camden

The Camden Cargo Bike Network (CCBN) aimed to support rollout of the Ultra Low Emission Zone (ULEZ) in Camden in April 2019. It also prepared businesses for the ULEZ expansion across the whole borough in October 2021 by supporting them to use cargo bikes for operations.

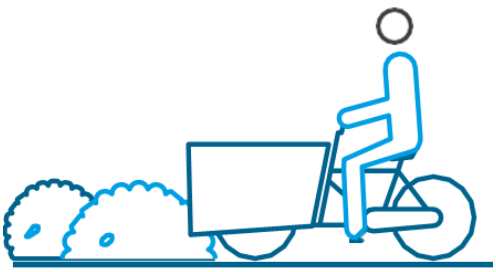
The project's objectives were to:

- support businesses to meet ULEZ requirements.
- encourage businesses to use cargo bikes.
- improve air quality by reducing businesses' use of cars.

Key achievements:

- Offered freight audits and cargo bike loans to businesses, along with green courier incentives such as promotional events.
- Provided four in-depth freight audits to support businesses to consolidate their fleets,
- Provided 25 cargo bike loans and 20 cycle skills sessions,
- During the COVID-19 lockdown, repurposed cargo bikes to enable use by local food banks to make deliveries. These trips would otherwise have been made by taxi.
- Worked with 'Neighbourhoods of the Future' scheme so Frognal and Fitzjohns residents could borrow a cargo bike up to one month for free.
- Set up 'Our Bike Scheme', a pilot offering two hours of free cargo bike use per day for local businesses and residents.
- Trialled new technology using the app based Our Bike scheme. The outcome of this initial pilot will influence future cargo bike plans.
- Used the 'Try Before You Bike' scheme from Peddle My Wheels to offer borough wide free cargo bike trials. This led to nine participants buying a cargo-bike at the end of the scheme.

Cargo bike trials offered across the borough to businesses and residents resulting in 9 participants purchasing cargo bikes.



Camden Cargo Bike Network

HAMMERSMITH ZERO EMISSIONS NETWORK

London Borough of Hammersmith and Fulham

The Hammersmith Zero Emissions Network worked with local businesses and organisations to help them reduce emissions from transport and travel.

The project's objectives were to:

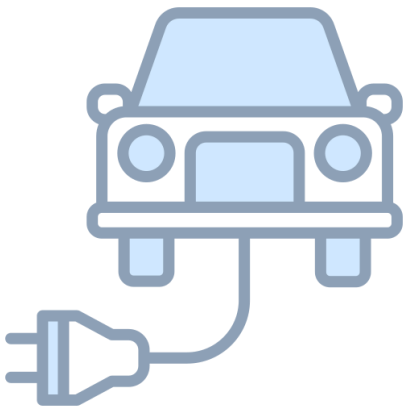
- reduce air pollution across Hammersmith.
- increase uptake of electric vehicles.
- increase uptake of shared mobility services.
- reduce reliance on petrol and diesel vehicles.

Key achievements:

- Produced delivery and service plans, providing data on where emissions were coming from and how to reduce them.
- Designed and launched the 'Parcels Not Pollution' scheme, a last-mile zero-emission cargo-bike delivery project.
- Funded three shared e-vans for businesses, to reduce ownership of petrol and diesel vehicles.
- Delivered communications and community activities to promote charging point network, e-van and cargo-bike schemes.
- Launched a cargo-bike hire scheme for residents around North End Road, Fulham.
- Engaged businesses across the borough to promote uptake of available schemes, and raise awareness of how to improve air quality.

Zero emission last mile delivery scheme established

Helping to reduce congestion and pollution in the area.



SCHOOL STREETS

London Borough of Redbridge

This project worked with the community to deliver school streets for local schools to promote active travel and reduce pollution.

The project's objectives were to:

- deliver three road closures supporting three schools to deliver school streets.
- promote active travel across schools in Redbridge.
- reduce air pollution near schools.
- act as a case study for other schools and boroughs planning to put in school streets.

Key achievements:

- Rolled out a programme of successful school streets at six locations across Redbridge, covering seven schools (one site included two schools). This exceeded the original proposal for three school streets.
- Programme included engagement, consultation, design, delivery of necessary infrastructure as well as monitoring and assessment.
- Motor vehicles down over 70 per cent at monitored locations during the closure period.
- Presented at two School Street Webinars to share best practice with the industry. These findings helped shape TfL's 'Getting to know School Streets' analysis – showing the feasibility of delivering a school street with several schools.

6 school streets
covering 7 schools implemented

ZERO EMISSIONS NETWORK (ZEN) PHASE 3

London Borough Hackney

This project was a multi-borough project supporting businesses and residents in Hackney, Islington and Tower Hamlets to reduce emissions and improve air quality.

The project's objectives were to:

- provide bespoke advice to businesses and support them to adopt sustainable transport solutions for their staff and operations.
- raise awareness of air pollution and encourage positive behaviour change.
- prepare businesses for changes such as ULEZ, new traffic filters and LTNs and to provide transport alternatives solutions.

Key achievements:

- Delivered over 500 emission-reducing measures across the network.
- Engaged with over 3,000 ZEN business and resident members.
- Issued 98 grants to businesses for cargo bikes and e-bikes.
- Piloted the UK's first cargo bike share scheme providing on-street, on demand cargo bike rental service.
- Introduced a new traffic filter in the area, resulting in businesses gaining increased footfall and improved urban realm.
- Delivered an annual networking event for businesses within the ZEN to promote community engagement and increase awareness of the ZEN measures.
- Hosted a series of online events to share best practice, including collaboration with the City of Oslo during Oslo Innovation Week.
- Expansion of ZEN principles to satellite hubs.
- Shared learning through the cargo bike share toolkit and e-bike switch toolkit.

UKs First Cargo bike share scheme

piloted providing on-street, on demand cargo bike rental service.

Low Emission Neighbourhoods

A Low Emission Neighbourhood (LEN) is an area-based scheme including measures to reduce emissions and promote sustainable living more generally. A LEN is delivered by a borough with support from TfL, the GLA, and the local community.

LENs focus on areas of high exposure to high pollution which can be reduced through local measures. These are locations with high trip generation and the potential to reduce emissions in the wider road network.

LENs have the following objectives:

- Reduce transport emissions, leading to improved air quality and climate change mitigation, and reduced negative impacts on health.
- Increase physical activity and health, by encouraging more walking and cycling.
- Reduce road traffic casualties through overall reduction in vehicle kilometres and alterations to traffic management.
- More efficient use of limited road space, urban regeneration and improved local economy.

GREENING THE FIDDLERS – BECONTREE HEATH LOW EMISSION NEIGHBOURHOOD

Barking and Dagenham

Greening the Fiddlers was a community led co-design and community engagement project in Becontree Heath, Dagenham. It aimed to create an environment to encourage people to walk and cycle more, and tackle local air pollution.

The project increased local people's awareness of air quality and helped to boost community cohesion.

The LEN's objectives were to:

- reduce car dominance.
- reduce air pollution.
- increase the number of people walking and cycling in the area.
- increase awareness in the community of the challenges and health impacts of poor air quality.
- boost community cohesion.

Key achievements:

- The Green Living Room at Fiddlers Green transformed a car dominated space into a plant-filled place for people to meet, rest, and enjoy. This included installing better crossing points, and new cycle parking.
- An unused area of verge on Stour Road was transformed into a habitat for pollinators creating a more pleasant, healthier environment for the community. In particular, families, and young adults walking, wheeling, and scooting to nearby schools and Coventry University campus.
- Pavement parking was removed opposite the school on Tenterden Road. The junction was also narrowed and the junction raised. This has slowed vehicles and improved the area for walking.
- Benches and planters installed outside Grafton Primary School.
- The crossing point at Grafton Primary school was improved, including installation of a speedhump, traffic island, and new road markings. This has encouraged drivers to slow down, improving safety and the pedestrian experience.
- Over 200 pupils engaged in workshops covering sustainability, air quality, street design and auditing.
- Over 90 pupils participated in school bike clubs.
- Almost 1,000 pupils contributed thoughts and feedback on urban realm schemes.
- Three Special educational needs and disabilities (SEND) bike clubs delivered, resulting in 60+ pupils successfully learning to ride.
- Over 750 bike repairs made, and 1600 cycle enquiries answered.
- Area greening, including 27 trees planted and installation of 356m2 permeable paving.
- 40m^2 of bee corridor beds created, 70m^2 low level planting and nine planters installed.

Three walking and cycling infrastructure schemes implemented which reduced car parking and improved cycle and pedestrian safety.

WALWORTH LOW EMISSION NEIGHBOURHOOD

London Borough of Southwark

The Walworth Low Emission Neighbourhood was designed to support regeneration surrounding Walworth Road, the local high street.

The project's objectives were to:

- reduce traffic on local streets, supporting use of Cycleways.
- improve active travel opportunities, especially among schoolchildren in the Newington Ward.
- support businesses in Walworth to work as a community to reduce pedestrian casualties to zero, and to deliver healthy streets locally.
- trial new parking technologies.

Key achievements:

- A new car free area with a cycle lane was installed in Browning Street, reducing car use and promoting active travel.
- New cycle parking was installed on Alberta Street near Kennington Station.
- A Santander Cycle Hire dock was installed at East Street, where there is a permanent market six days a week, with vehicular through traffic only permitted on Mondays. This dock promotes access to the market by active travel.
- Pedestrianisation of Liverpool Grove from the junction with Walworth Road to St Peter's. This creates a new community pedestrian space to encourage walking an increase dwell time near the Walworth Road main shopping street.
- Hosted two car free days by holding events including dockless cycle hire demonstrations and voucher giveaways, alongside Dr Bike workshops. This helped to activate spaces freed by traffic restrictions.
- Consultation engagement with over 1,500 responses, 200 engaged businesses and local schools.
- Ten pop-up sessions held with Sustrans at locations across the Walworth area and outside local schools to engage the community on air quality.

15 per cent reduction in car journeys
in the area as a result of the schemes.

STOKE NEWINGTON LOW EMISSION NEIGHBOURHOOD

London Borough of Hackney

The Stoke Newington LEN introduced a range of measures to reduce traffic and encourage active travel and other sustainable transport modes. The aim was to improve local air quality and reduce exposure to emissions.

The LEN's objectives were to:

- reduce traffic and encourage active travel and other sustainable transport modes.
- improve pedestrian permeability.
- improve urban realm and introduce green spaces.

Key achievements:

- Rollout of an experimental Low Traffic Neighbourhood. This included a new bus gate restriction of Stoke Newington Church Street and four additional traffic filters around the LEN. As a result, traffic along Stoke Newington Church Street has reduced by 42 per cent.
- Delivered six new parklets in the LEN. Each parklet has seating, cycle parking and greening, designed to encourage more people to travel actively to the high street. They have been delivered under permanent traffic orders, meaning parking has been reduced in favour of active travel.
- Installation of new pedestrian crossings and widened footway along Stoke Newington Church Street. This is part of promoting Healthy Streets and increasing the rate of walking and cycling.
- Urban realm and greening improvements at Kynaston Avenue, encouraging more people to walk to and from the LEN.
- Installation of 4 cargo bike club locations.
- Delivered a consultation on the scheme with over 1,500 responses.

42 per cent traffic reduction

thanks to the LEN at Stoke Newington Church Street.

CAMDEN TOWN LEN

London Borough of Camden

The Camden Town LEN project covered air quality, sustainability, and transport. It aimed to reduce traffic dominance and improve air quality in the area.

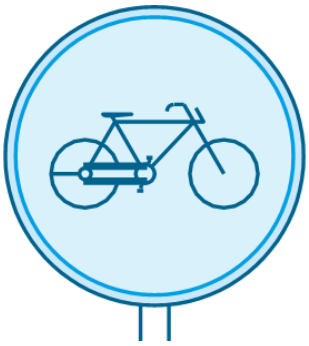
The LEN's objectives were to:

- introduce transformational infrastructure measures to enable walking and cycling in the LEN.
- support the uptake of low emission vehicles for residential and commercial use in the LEN area.
- reduce the total motor vehicle traffic movements in the LEN.
- reduce emissions from buildings.

Key achievements:

- Installation of 3,300m of segregated cycle lanes.
- Eight restrictions on motor vehicle movements to reduce motor traffic movement and dominance on local streets introduced in the project area.
- Implementation of a Healthy School Street.
- Two crossing upgrades designed to increase active travel, including a new zebra crossing with associated rain garden.
- Installation of a Sustainable Drainage (SuDs) scheme.
- Installed 22 cycle hangars for use by residents and created 13 Dockless Bike and E-Scooter Hire bays.
- Delivery of two fast charge electric vehicle charging points and 19 lamp column EV charging points.
- Diffusion tube monitoring at 13 sites on Camden High Street. This showed a 28.3 per cent reduction in NO2, three per cent higher than the borough average.
- Carried out an innovative study into the air quality of commercial kitchens by collecting indoor and outdoor air quality measurements across eight establishments.
- Carried out a portable measurement study into the effect of street food vending on air quality, and its impact on market air quality.
- Delivered air quality engagement at three primary schools delivering six workshops and four launch assemblies. This reached over 1,400 local pupils.
- Developed a 'Cleaner Air Routes for Camden Town' map for students.

3,300m segregated cycle lanes
delivered in the LEN area.



Business Low Emission Neighbourhoods

Business Low Emission Neighbourhoods (BLENs) are designed to reduce pollution on high streets, around offices or within retail parks. These holistic schemes include such measures as anti-idling campaigns, zero emission delivery services and cleaner walking routes for staff and customers. They are delivered by local councils working in partnership with local business groups, and funded through the Mayor's Good Growth Fund.

The BLEN schemes are designed to:

- lead to demonstratable reductions in air pollution emissions, concentrations, and exposure.
- encourage and support organisations to reduce their own emissions, thereby reducing energy and fuel costs, and boosting reputations and public relations opportunities for SMEs.
- enhance public realm for walking and cycling in town centres, and business and retail areas, making it more attractive for visitors and staff.
- provide support and a platform for these areas to become demonstrator locations for cleaner vehicles, and/or zero emission zones.

The objectives of BLENs are to:

- reduce pollution emissions and exposure.
- increase walking and cycling.
- increase take up of electric vehicles.

NORTH END ROAD BLEN

London Borough of Hammersmith and Fulham

This air quality improvement and community engagement project was focused around North End Road Market in Hammersmith and Fulham. It aimed to improve the market area, making it a safer, more attractive and greener environment for traders and locals alike.

The project enhanced public space and increased awareness of air quality within local businesses.

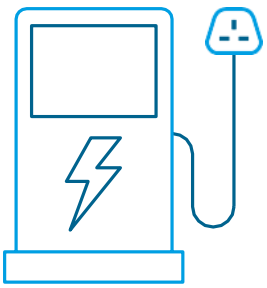
The objectives of the BLEN were to:

- green the market by providing local Trader storage facilities and encouraging use of zero-emission freight services
- enhance public space along North End Road by creating two gateways, adding seating areas and planting trees
- increase community awareness around the challenges and health impacts of poor air quality.

Key achievements:

- Installed 27 EV chargers along North End Road supporting both vehicles and power outlets for market traders.
- Trader storage facilities installed to reduce Trader vehicle movements.
- Supported over 1,000sqm of public realm improvement works including a range of walking and cycling improvements, and 122sqm of greening.
- Planted 24 trees along North End Road to help mitigate areas of poorer air quality.
- Introduced a cargo bike service to North End Road Market. A total of 88 businesses and residents were registered when the service first opened.
- Over 11,000 residents and 190 businesses and traders engaged.

27 EV chargers
installed along North End Road for market traders.



LEY STREET BLEN

London Borough of Redbridge

The Ley Street BLEN project focused on encouraging EV uptake and improving active travel in the borough.

The objectives of the BLEN were to:

- encourage electric vehicle uptake.
- promote active travel in the area.
- improve local freight movements.

Key achievements:

- Ultra-fast charging hub installed at the council's Ley Street depot, open to public use. This hub can provide up to 80% charge in around 20-30 minutes, depending on vehicle specifications.
- Installation of a Breathe London Node adjacent to the charging hub depot, indicating a reduction in NO2.
- The charging hub enabled the procurement of 12 EV council fleet vans, replacing polluting diesel.
- Greening, including Sustainable urban Drainage (SuDs) system established provided at the A12 / Ley Street / Horns Road junction.
- Installation of cycle storage, encouraging people to use bicycles for commuting and other short-distance travel instead of using motorised vehicles.
- Raised walkway junction improvements installed on Ley Street. This has made it safer for pedestrians and children walking to and from the two local schools in the area. There has been an increase in pedestrian footfall at this location since its introduction.

Ultra-fast charging hub

installed for public use to encourage EV uptake with Breathe London Node indicating a reduction in NO2 due to a combination of ULEZ, new EV charging, and the junction improvements.

LEY Street BLEN

TOWER HAMLETS CENTRES AND MARKETS BLEN

London Borough of Tower Hamlets

This project was designed to reduce the impact of retail businesses on air pollution, as well as reduce exposure for people visiting the markets.

The aim was to deliver tangible air quality improvements in Tower Hamlets by targeting vehicle emissions and commuter behaviour.

The project's objectives were to:

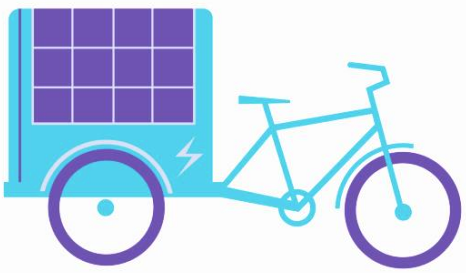
- Support local businesses and workplaces on reducing operating costs and emissions by introducing cost effective zero emission delivery methods.
- Enhance the EV charger fleet available for local housing estates.
- Promote active travel for commuting through the provision of secure cycle parking for businesses.

Key achievements:

- Successful e-cargo bike delivery service for Chrisp Street Market used for 1,088 deliveries covering 1,632km. Within just a few months of being set up, it saved 185kg of CO2 and reduced NO2 by 0.087kg and PM 2.5 by 0.0054kg.
- Installation of 10 EV chargers on local housing estates ineligible for other funding sources.
- Installation of 50 secure cycle parking spaces, and eight cargo bikes, for businesses through Smarter Workplace Travel.
- NO2 emission reduction of 0.05816kg noted.
- Engaged over 700 people through the Chrisp Street Delivers project.
- Nine businesses benefited from smarter workplace measures such as match funding for cycle storage or showers for cyclists.

E-cargo bike delivery service introduced for Chrisp Street Market

Reducing over 1600 km vehicle deliveries in the area.



LEYTONSTONE BLEN
Waltham Forest

This project aimed to reduce exposure to pollution and improve overall air quality along Church Lane, High Road Leytonstone, and Kirkdale Road.

It aimed to enhance public space and raise local businesses' awareness of air quality in the community.

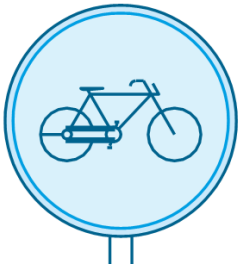
The project's objectives were to:

- Reduce emissions from motor vehicles.
- Increase levels of walking and cycling within and around the area, supported improved local active travel infrastructure.
- Make kerbside space more efficient with priority given to low and zero-emission mobility.
- Increase general uptake of public transport and the use of low and zero emission vehicles.
- Improve the quality and resilience of the public realm.

Key achievements:

- A 446m extension of High Road Leytonstone cycle track connecting it to existing cycling infrastructure.
- New Green Links between town centre and Wanstead Flats, providing new clean and safe walking routes. This has made the area more attractive and more accessible for residents.
- Collaboration with local primary schools to improve school entrances and design public art installations for in and around the schools.
- Significant community engagement both online and on-site to aid in the design process.
- A total of 88sqm of greening, including three kerbside parklets and 11 new trees

446m cycle path
extended to connect existing cycling infrastructure, creating a continuous and safer path.



NINE ELMS BLEN

London Borough of Wandsworth

This project worked with businesses, schools, and residents to create a healthier neighbourhood through green infrastructure and active travel.

The project's objectives were to:

- Reduce the number of vehicles through consolidated deliveries and a controlled parking zone.
- Encourage uptake of low emission vehicles.
- Encourage modal shift by putting in segregated cycle paths, more cycle storage, improving access to cycles and boosting the public realm.
- Reduce exposure to vulnerable groups by installing green walls and holding idling action events.

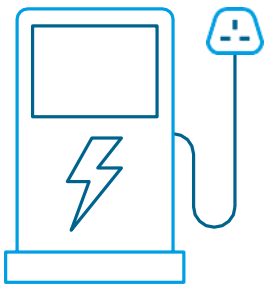
Key achievements:

- Installation of 1,500m two-way segregated cycle path.
- Six EV charging points installed at New Covent Garden Market, leading to 10 per cent increase in EVs visiting the flower market.
- Twenty cycles delivered across St George's Primary and Griffin Primary schools used for cycle training and cycle clubs. Children unable to ride a bike were identified and added to a bespoke cycle training programme.
- Renovation of existing bike storage at St George's Primary.
- Cycle storage infrastructure provided for three housing estates.
- Green wall installed at St George's Primary to protect pupils from vehicle emissions.
- Ten trees planted during the programme and 120sqm of greening.
- Parklet installed on Condell Road as part of Thessaly Road Improvement Scheme.
- Engaged with 55 residents, delivered 10 face-to-face events, met with 37 businesses.
- 'Pollution solution' air quality workshops for pupils at St George's Primary and 'Idling action' workshop for pupils at Griffin Primary, engaging over 120 pupils and staff.

'

Six EV charging points installed

at New Covent Garden Market leading to 10% increase in EVs visiting the flower market.



LONDON ROAD BLEN

London Borough of Croydon

This 'Healthy High Street' project worked with businesses and organisations along the London Road corridor to improve air quality and reduce exposure.

The project's objects were to:

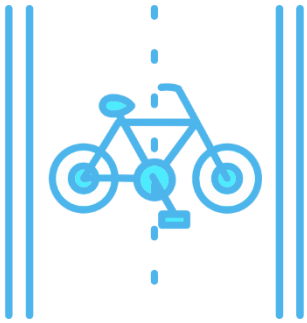
- engage the local community on air quality and exposure reduction.
- promote cycling within the BLEN area.
- improve air quality and reduce pollution exposure.

Key achievements:

- Introduction of an experimental Low Traffic Neighbourhood in the Parson Mead area.
- Permanent segregated cycle lanes added to the northern section of the scheme with a 'Quietway'-style cycle route through the experimental LTN.
- Creation of new and dynamic areas of urban greening across the BLEN.
- Awareness raising with banners to promote the Clean Air Campaign, generating positive engagement. These can be used on future clean air initiatives across the borough.
- Identification of future EV charging point locations of at Croydon University Hospital, to be delivered in 2024, as part of the project.
- Strong engagement with the local community, including working with schools and businesses.

Segregated cycle lanes installed

Improving cyclist safety throughout the LEN.



Good Growth Fund projects

The Good Growth Fund is Mayor Sadiq Khan's £70m regeneration programme to support growth and community development in London.

Working with the London Economic Action Partnership (LEAP), the fund supports innovative, best practice regeneration activities, that enable:

- Londoners to actively participate in their local community and have a say in how their city is shaped.
- delivery of coordinated place-based strategies that welcome growth in a way that works with the physical character of London's many places.
- diverse and accessible local economies – from our high streets and town centres to industrial areas. This allows them to realise their full potential and making London a place of opportunity for all.

This air quality workstream was part of the 2020 GGF projects. These included delivering a range of air quality improvements to major regeneration projects to create holistic environmental and economic schemes. In addition, four standalone air quality projects were supported, as detailed below.

FLEET INFRASTRUCTURE ELECTRIFICATION

London Borough of Islington

As part of their Vision 2030: Creating a Net Zero Carbon Islington strategy, the council committed to reduce transport emissions. This includes emissions from their own vehicle fleet – approximately 500 internal combustion engine (ICE) vehicles - which deliver integral frontline services such as waste collection and housing services.

The council will replace all ICE vehicles with full EVs by 2030. This is dependent on delivery of the necessary infrastructure to allow greater electrical use at vehicle storage locations to enable increased charging. In 2019, the council commissioned UK Power Network (UKPN) to establish Islington's electrical requirements. UKPN recommended the depot's network capacity be increased to 3,250 kVA and that on-site EV infrastructure should be built in four phases. This GGF project included high voltage (HV) grid connection, substation construction and installation, low voltage connection and delivering the required wiring for site energisation.

The objectives were to:

- support the transition to cleaner, more sustainable energy sources.
- protect the vulnerable, improving health and inequality by reducing overall CO2 emissions and local pollution levels of nitrogen dioxide, particulate matter PM10 and PM2.5.
- develop a partnership with schools by providing safer and better ways of travel via newly procured EV buses.
- reduce operational costs, ULEZ penalty charges, fuel consumption and vehicle maintenance downtime.

Key achievements:

- Explored new approaches to energy management and efficiency, including implementing smart grid technology with Luna Energy. It also established an integrated back-office system to remotely manage all council EVCPs and support the trial of new energy sector hardware.
- Islington can now charge over 200 electric vehicles at the site, mostly large and traditionally harder to convert and charge refuse vehicles. This makes it the largest Waste and Recycling Centre EV charging depot in London.
- Created 12 construction jobs at London Living Wage or above.
- Estimated reduction of over 230,000 kg of NOx production from fleet (against 2019/20 baseline).
- The system will maximise charging at times when renewable power is supplying a greater proportion of grid electricity to support transition to greener energy.

400 tonnes of CO_2 and 230,000kg of NOx
estimated reduction of emissions for electric fleet operation versus ICE vehicles.

CAMDEN ELECTRIC MOORINGS

London Borough of Camden

The Camden Electric Moorings was established to provide access to clean mains electricity at the visitor canal boat mooring area of the Regent's Canal in Camden, between St. Pancras Way and Camley Street. Camden Council and the Canal & River Trust jointly delivered the project through a collaborative partnership, with funding from the Mayor's Good Growth Fund.

Most canal boaters rely upon diesel engines for electrical power while they moor alongside the canal towpath in London. This is a source of carbon emissions and air pollution, posing a health risk to canal boaters and people living, working, or travelling nearby.

The objectives were to:

- improve local air quality at key towpath mooring areas.
- reduce air pollution related health impacts for boaters, residents, and those enjoying the public space alongside London's waterways.
- engage with boaters via promotion and communications to support use of the EV charging points and encourage further collaboration on air quality and sustainability.
- support Camden's Clean Air Action Plan with more EV charging infrastructure and raise awareness of the serious health conditions linked to poor air quality.

Key achievements:

- Four electrical power supply bollards installed, each with four sockets, enabling up to 16 canal boats to connect to mains electricity at any time.
- The bollard was completed and commissioned at the end of January 2023. By early February, 75 boaters had used the power supplies, consuming 3,774 kWh of electricity and reducing emissions by 3.2 tonnes of CO2-equivalent.
- Helped build momentum in move from fossil fuel-derived electrical power at visitor moorings, toward gradual installation of 'eco mooring' in other local authority areas.
- Indicative data from diffusion tube NO2 monitoring installed along visitor moorings area show that average NO2 concentration fell 12 per cent 2021 to 2022. This is a larger reduction than measured at other diffusion tube monitoring sites in Camden over the same period.

12 per cent NO2 reduction

along the visitor mooring area in Camden

SOUTH / CENTRAL HACKNEY ACTIVE TRAVEL AND AIR QUALITY IMPROVEMENTS

London Borough of Hackney

The area in and around Broadway Market, London Fields, and Mare Street (South) is rich with local businesses and residential streets. However, certain sections are subject to air pollution, rat-running, and a poor public realm.

This programme provided a holistic approach towards improving localised air quality, promoting a modal shift towards active travel, and encouraging uptake of electric vehicles.

The objectives were to:

- improve air quality, reduce traffic, and reduce car parking, building on 2018's implementation of a School Street/bus gate on Westgate Street and Lansdowne Drive.
- back small businesses by enhancing the surrounding public realm and providing facilities to make green switches more easily. For example, EV charging points and cargo bike sharing.
- make Hackney's streets more inclusive, and easier and safer for everybody to cross. This includes removing through traffic and parking spaces, slowing down motor vehicles and cyclists, and new green dwell spaces.

Key achievements:

- EV fast charging stations introduced to Duncan Road and Beck Road with two dedicated bays for users. Ten lamp column EV charging points were also installed.
- Permanent closure to area between Westgate Street and Ada Street near Broadway Market for a pedestrian zone on Saturday/Sunday. This achieved a significant traffic reduction, alongside improvements for pedestrians, wheelers and cyclists passing through.
- The UK's first on-street, on-demand, electric cargo bike sharing service launched in Broadway Market. The bikes can be hired by businesses, residents, and the public to make deliveries, collect shopping, or run other errands. The docking station houses two electrically assisted cargo bikes which can carry up to 80kg each.
- Duncan Road has been transformed into a 'Green Corridor'. This is an area of low pollution linking Broadway Market and South Mare Street with rain gardens, low level shrubs and cycle parking.
- The Well Street junction has been widened and resurfaced to improve the experience for all users. Part of the carriageway has been converted with a new SUDs rain garden to create a more attractive, climate resilient environment.
- At Beck Road, a parklet has been introduced with integrated cycle parking. This provides a green and accessible resting space for the local community.

UK's first on-street, on-demand cargo bike hire service

Opened for individuals and businesses in Broadway Market.

THE GRID PROJECT

Film London

This project installed a supply of green energy via the mains network to a key film unit-base location London. Unit bases are used by productions to base technical, production office and welfare vehicles when filming on location. Using green energy via the mains network helps to reduce CO2, NOx emissions and particulate matter as well as noise pollution associated with the diesel generators that have traditionally been used for filming. This project help trial a whole new way of powering film in London, and the GLA is now working with other partners to encourage the installation of more of these cleaner and greener unit bases.

The installation was undertaken Victoria Park in Tower Hamlets.

The objectives were to:

- reduce the carbon footprint of film productions at key unit bases in London and improve on-site air quality.
- sustain economic benefit from filming for local people / local authority, and ensure London remains an attractive production location.
- educate production companies through Film London's wider Green Screen Programme on how to reduce their emissions during production.
- support the Mayor of London's Environment Strategy and Culture Strategy.

Key achievements:

- Showcased what is possible by working with UKPN to upgrade the power network and install this high-capacity electrical hook up, suitable for filming and events, and capable of removing the need for all polluting diesel generators.
- Estimated annual savings of 2,393kg NOx; 169,556 kg C02; and 7.43kg PM against 2018 baseline.
- The cabinet is also being used for events in the park, including music events and Christmas tree markets.
- When compared to using a diesel generator to power lights and facilities, there are significant emission and cost savings.
- Film London created and managed the Equal Access Network, supported by the GLA. Through this, 95 new entrants to the network have had environment and sustainability related training, improving access to members gaining jobs within the industry.
- Launch event with several high-profile figures from the Industry.

169,556 kg CO2 and 2,393kg NOx

Estimated annual emission savings.

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MAYOR OF LONDON

TRANSPORT FOR LONDON

EVERY JOURNEY MATTERS