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AIR QUALITY NEWHAM - AGENDA

1. AIR QUALITY ACTION PLAN / CLIMATE EMERGENCY ACTION PLAN
2. AIR QUALITY MONITORING NETWORK AND DATA
3. INRODUCTION TO PROJECTS AND PROGRAMMES
4. PUBLIC HEALTH

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AIR QUALITY ACTION PLAN

Levels of air pollution in Newham are generally high but they have been declining over the past 20 years. Whilst levels of pollution have been reducing, levels of many of the pollutants are above World Health Organisation guidelines.

Newham has had an air quality action plan since 2000 with actions which seek to reduce emissions of pollutants in the borough. This action plan is due to be revised in 2024.

[Air Quality Action Plan 2019 - 2024 (newham.gov.uk)]



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NATIONAL AIR QUALITY OBJECTIVES

Air Quality Standards Regulations 2010 derived from an older European Union Directive.

NO_2 40 µg/m^3 as an annual mean

200 µg/m^3 not to be exceeded more than 18 times a year

PM10 50 µg/m^3 not to be exceeded more than 35 times a year as a 24 hour mean

40 µg/m^3 as an annual mean

PM2.5 20 µg/m^3 as an annual mean

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ENVIRONMENT ACT 2021

On October 2022, the government set a new target for PM2.5 for England. A maximum concentration of 10µg/m^3 to be met across England by 2040

Responsibility for meeting these targets rests with central government. Local government is meant to assist in meeting these targets.

Environment Act 2021 (legislation.gov.uk)



THE MAYOR OF LONDON

The London Mayor has set an aim of achieving $PM_{2.5}$ levels of 10 ug/m^3 by 2030

London Environment Strategy



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WORLD HEALTH ORGANISATION

WHO estimates that in 2019, some 37% of outdoor air pollution-related premature deaths were due to ischaemic heart disease and stroke, 18% and 23% of deaths were due to chronic obstructive pulmonary disease and acute lower respiratory infections respectively, and 11% of deaths were due to cancer within the respiratory tract.

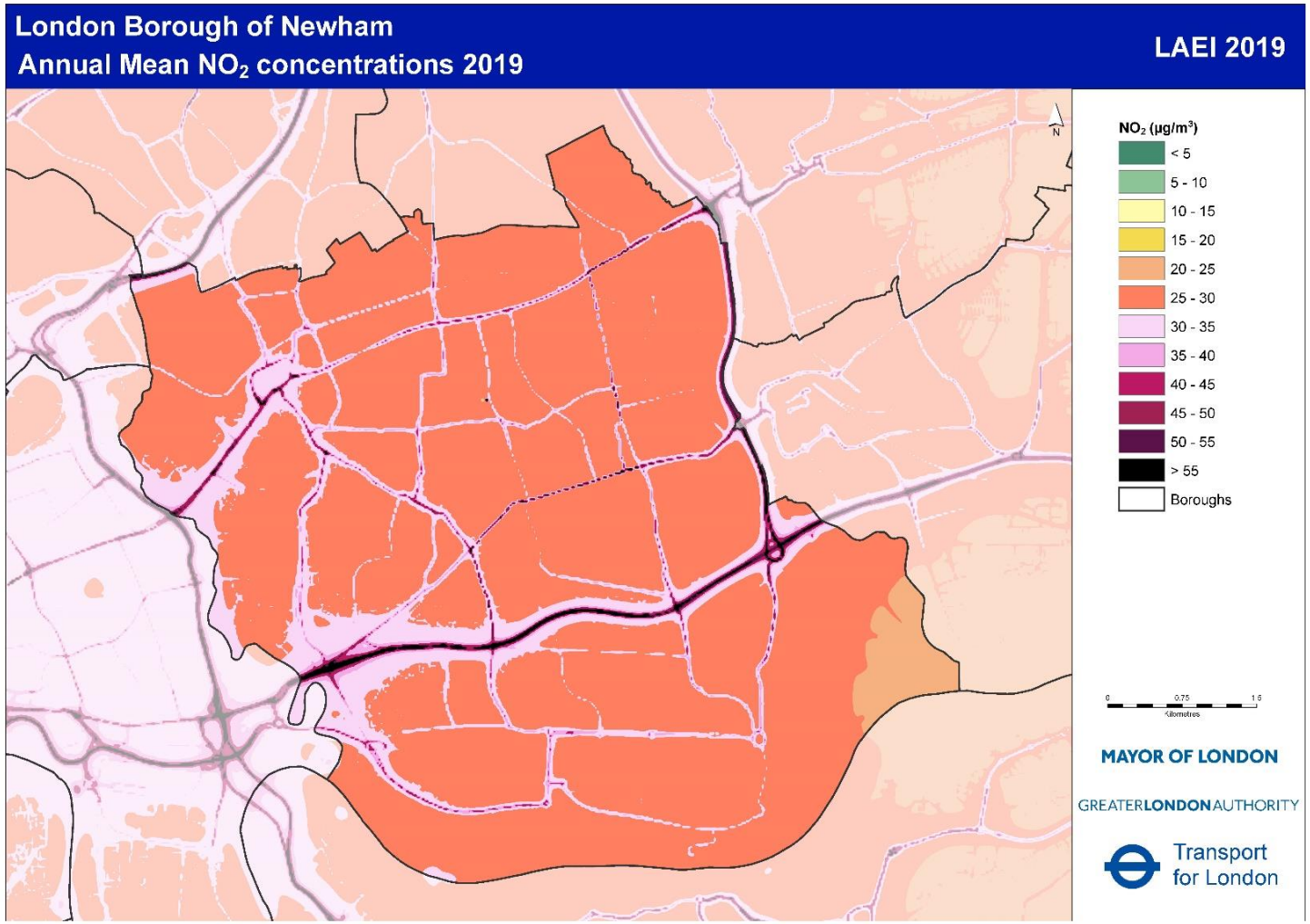
WHO guidelines provide information on health effects of various pollutants. They are advisory only.

- NO_2 concentrations of 10 µg/m^3 annual average and 25 µg/m^3 24-hour mean
- PM_{10} reducing in stages to 15 µg/m^3 annual mean, 45 µg/m^3 24-hour mean
- $PM_{2.5}$ reducing in stages to 5 µg/m^3 annual mean, 15 µg/m^3 24-hour mean

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NEWHAM ANNUAL MEAN NO2 CONCENTRATIONS 2019

Newham London



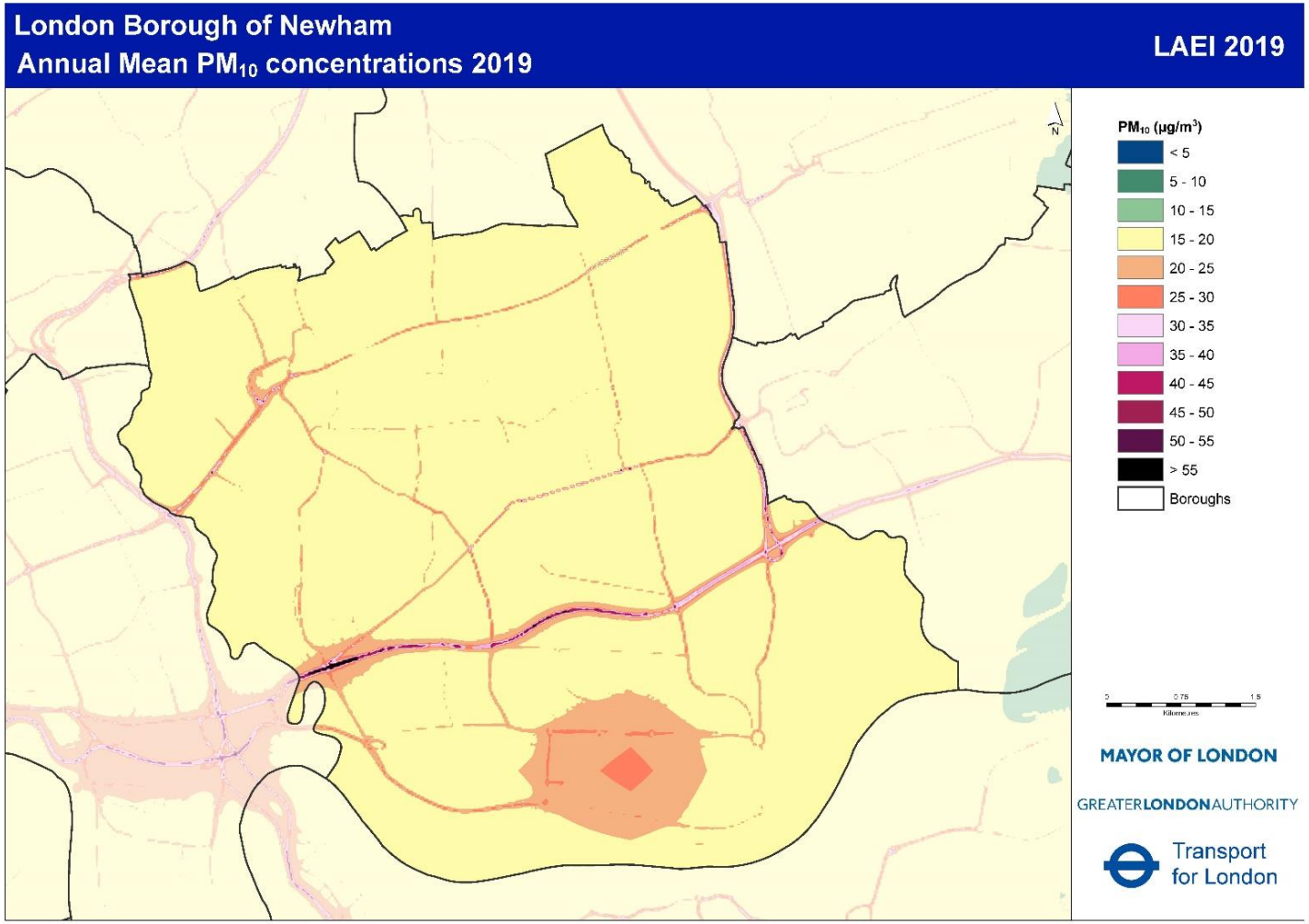
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NEWHAM ANNUAL MEAN PM10 CONCENTRATIONS 2019

Newham London



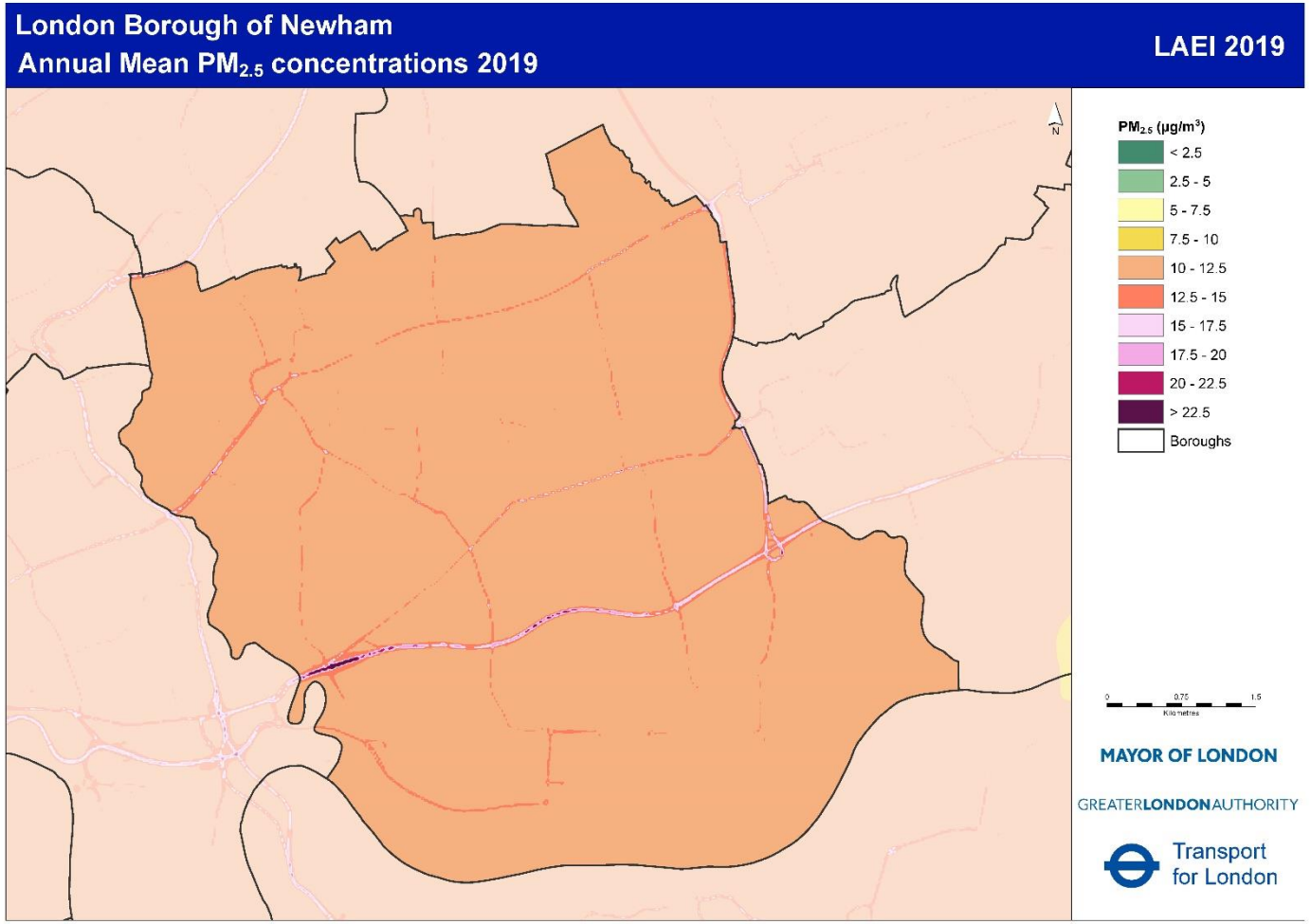
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NEWHAM ANNUAL MEAN PM2.5 CONCENTRATIONS 2019

Newham London



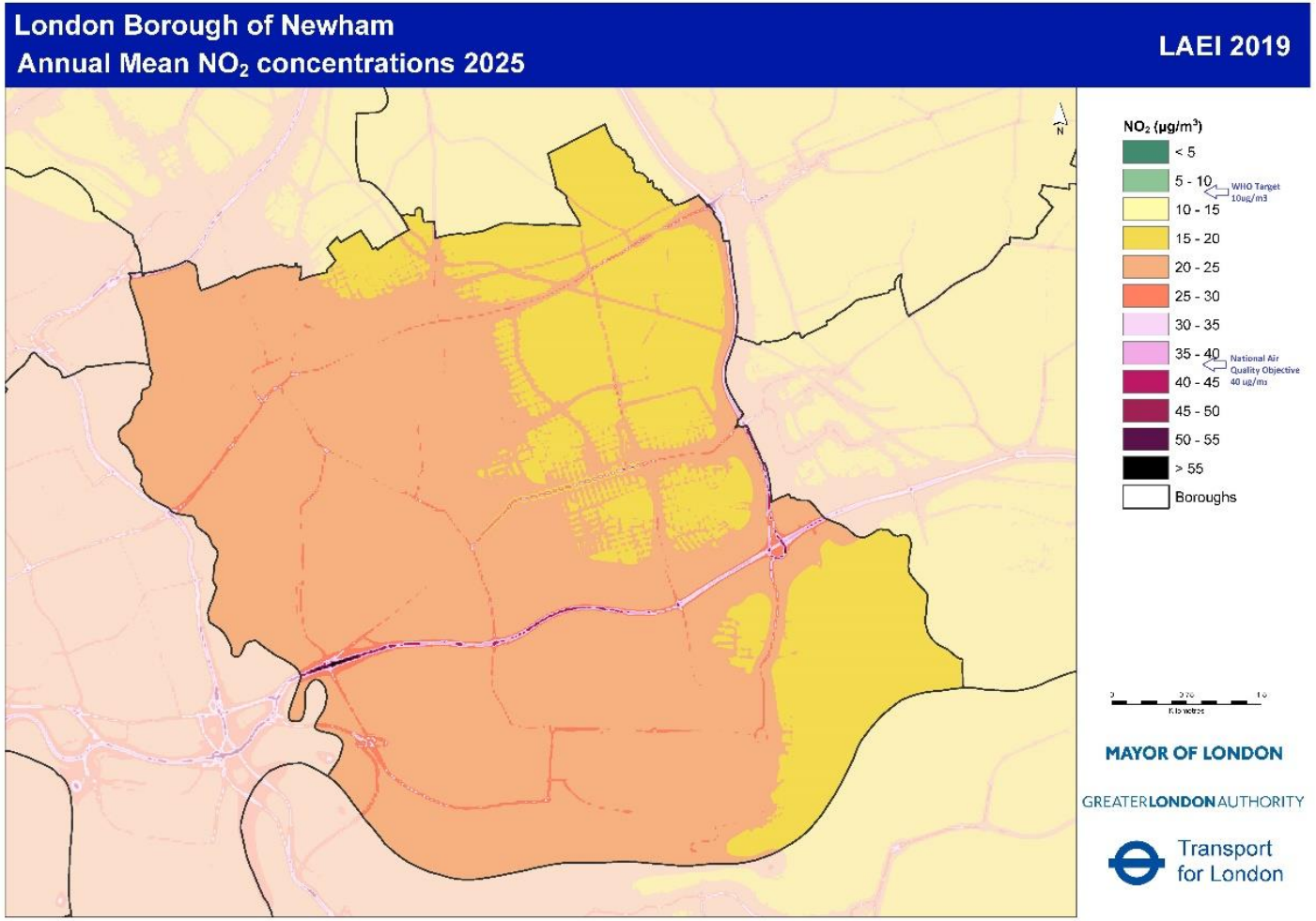
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NEWHAM ANNUAL MEAN NO2 CONCENTRATIONS 2025

Newham London



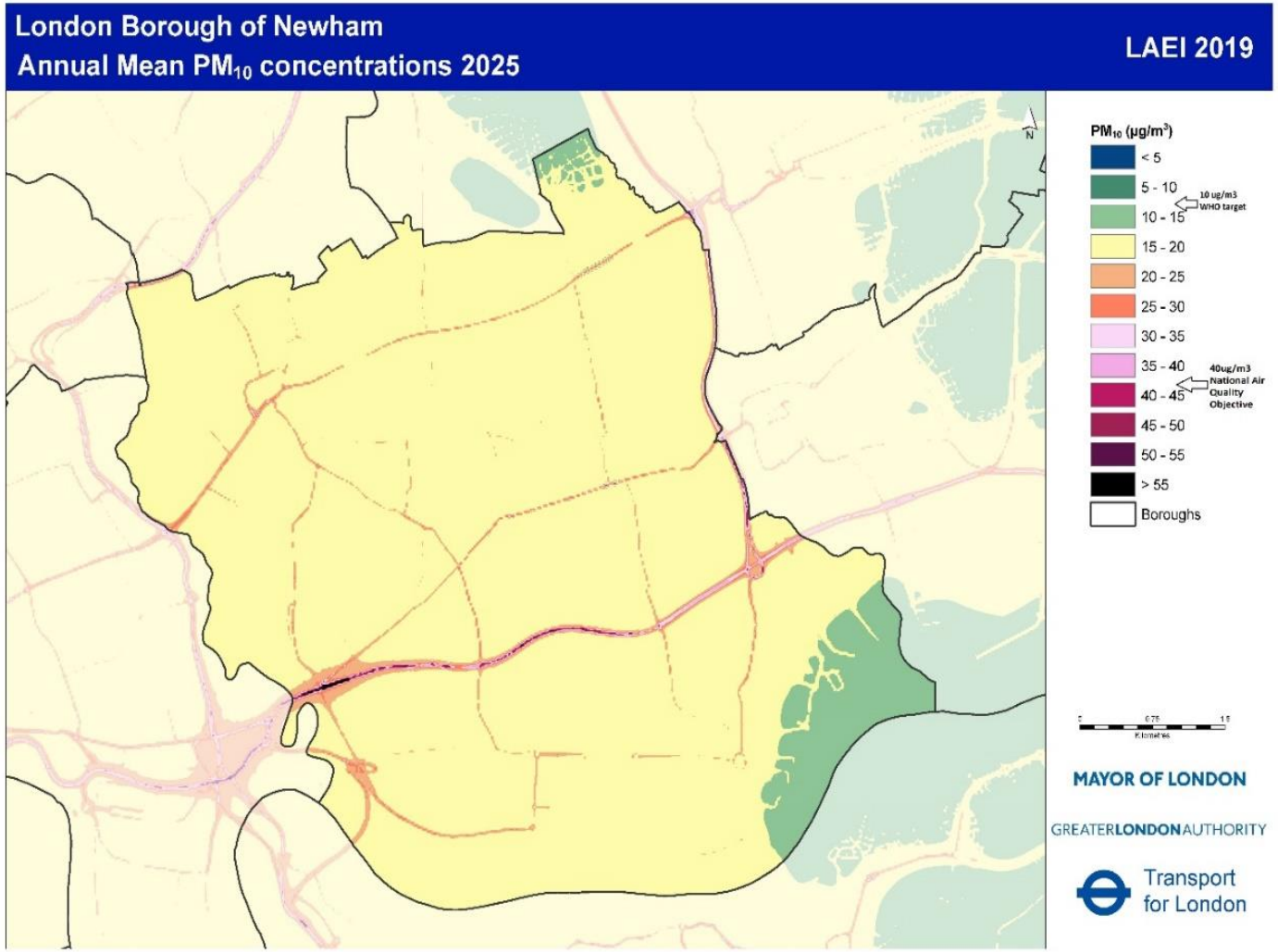
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NEWHAM ANNUAL MEAN PM10 CONCENTRATIONS 2025

Newham London



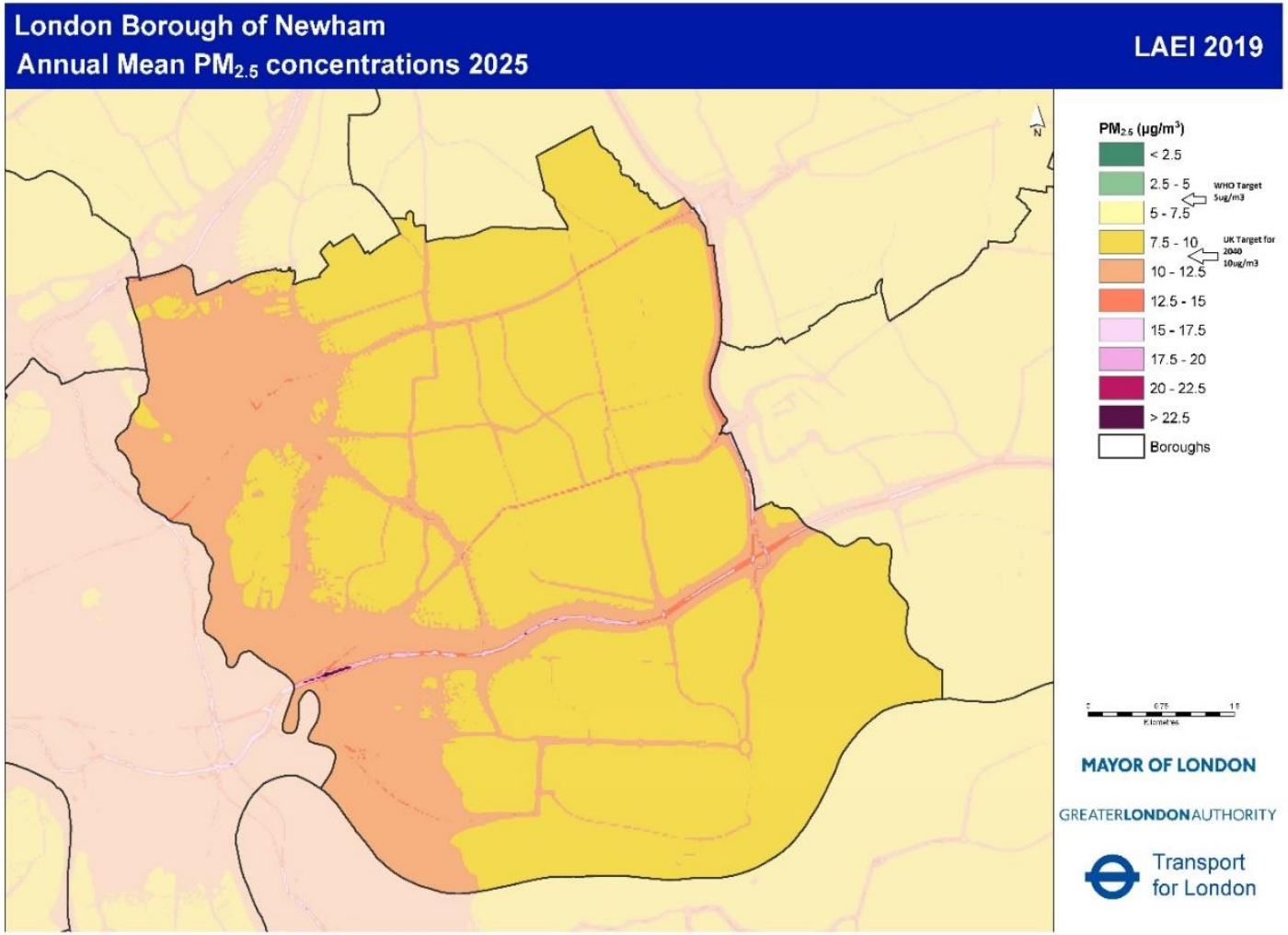
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NEWHAM ANNUAL MEAN PM2.5 CONCENTRATIONS 2025

Newham London

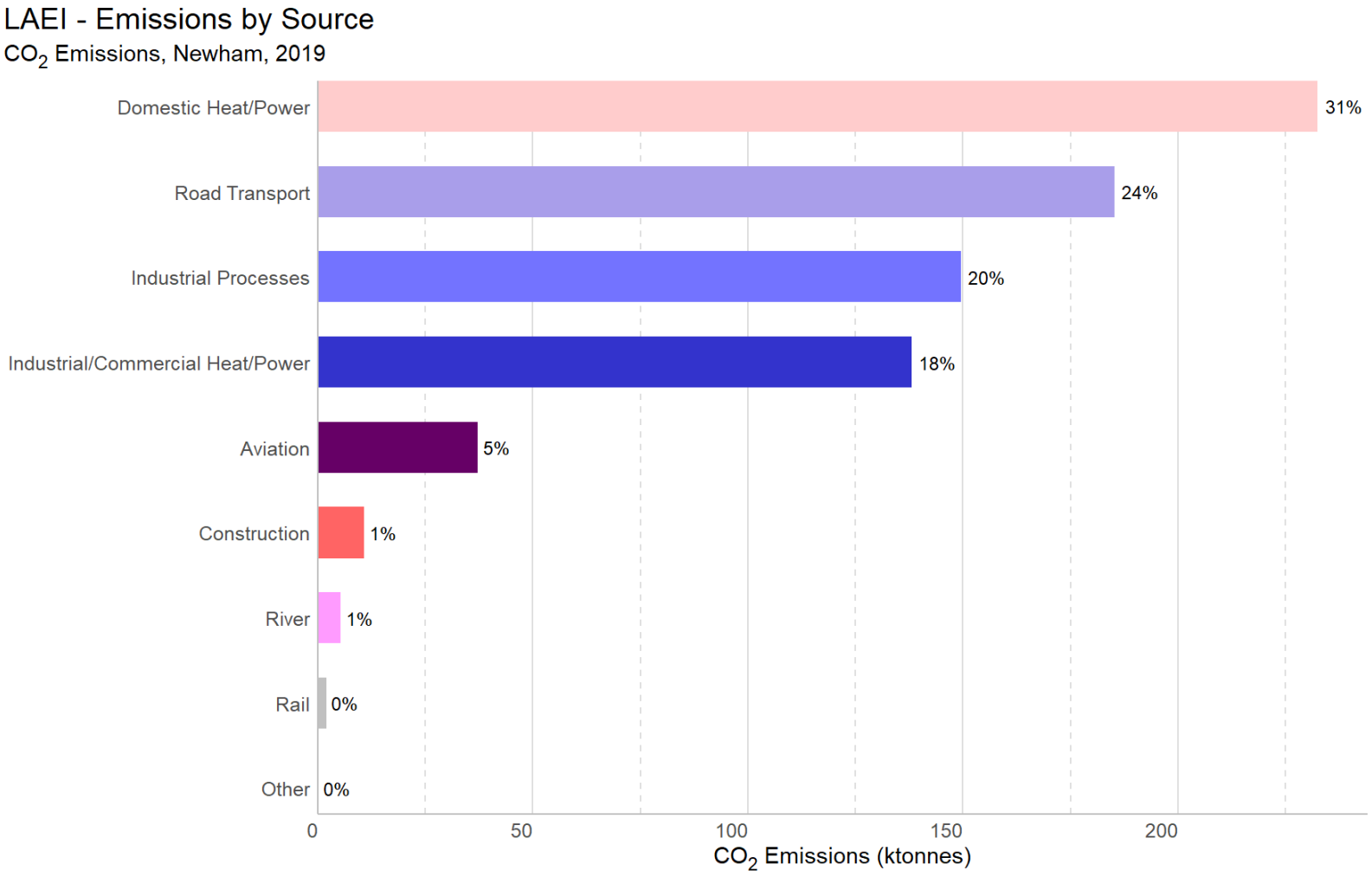


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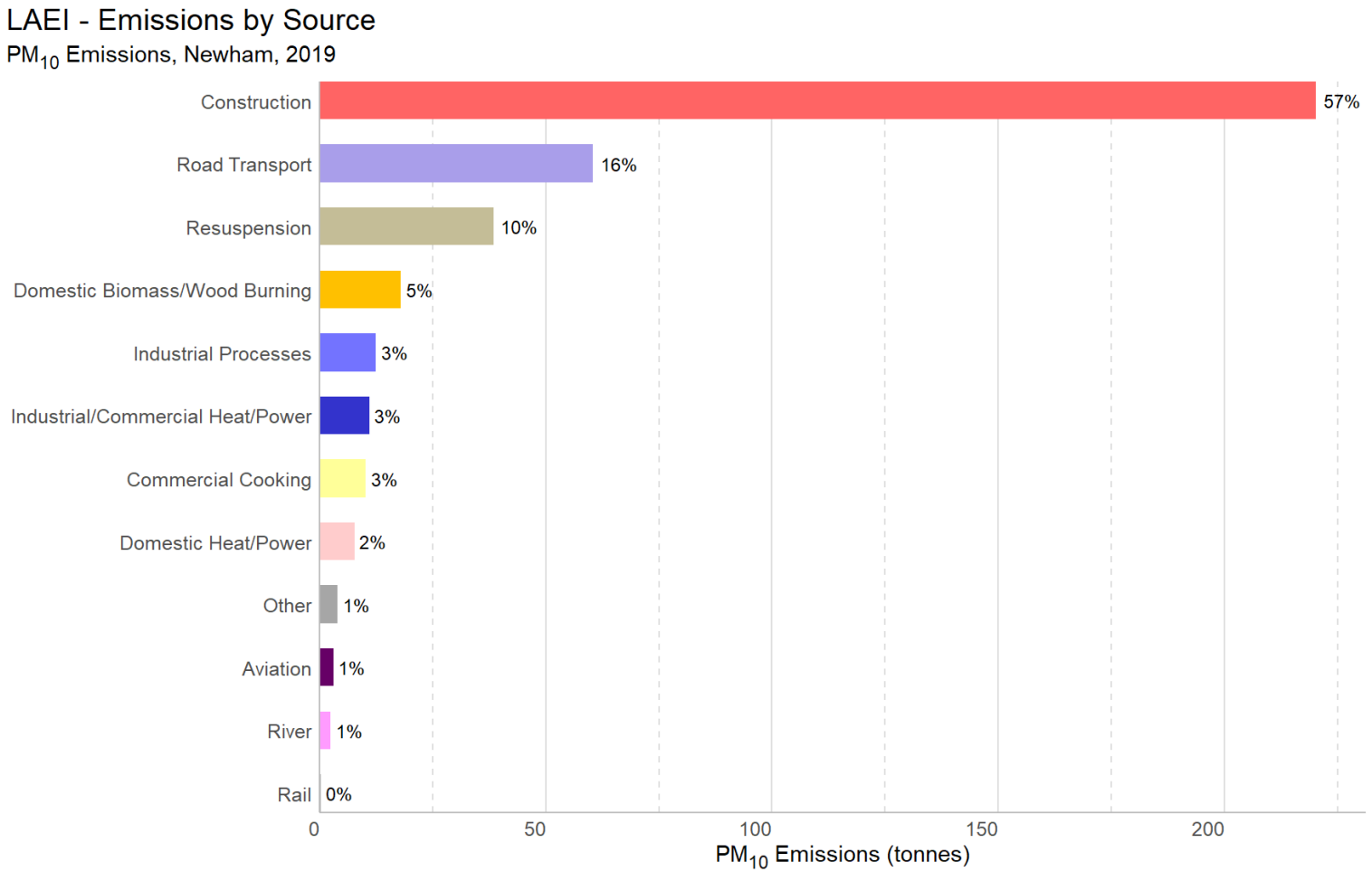
CO2 EMISSIONS BY SOURCE 2019



Source: Strategic Analysis, TfL City Planning

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PM10 EMISSIONS BY SOURCE 2019

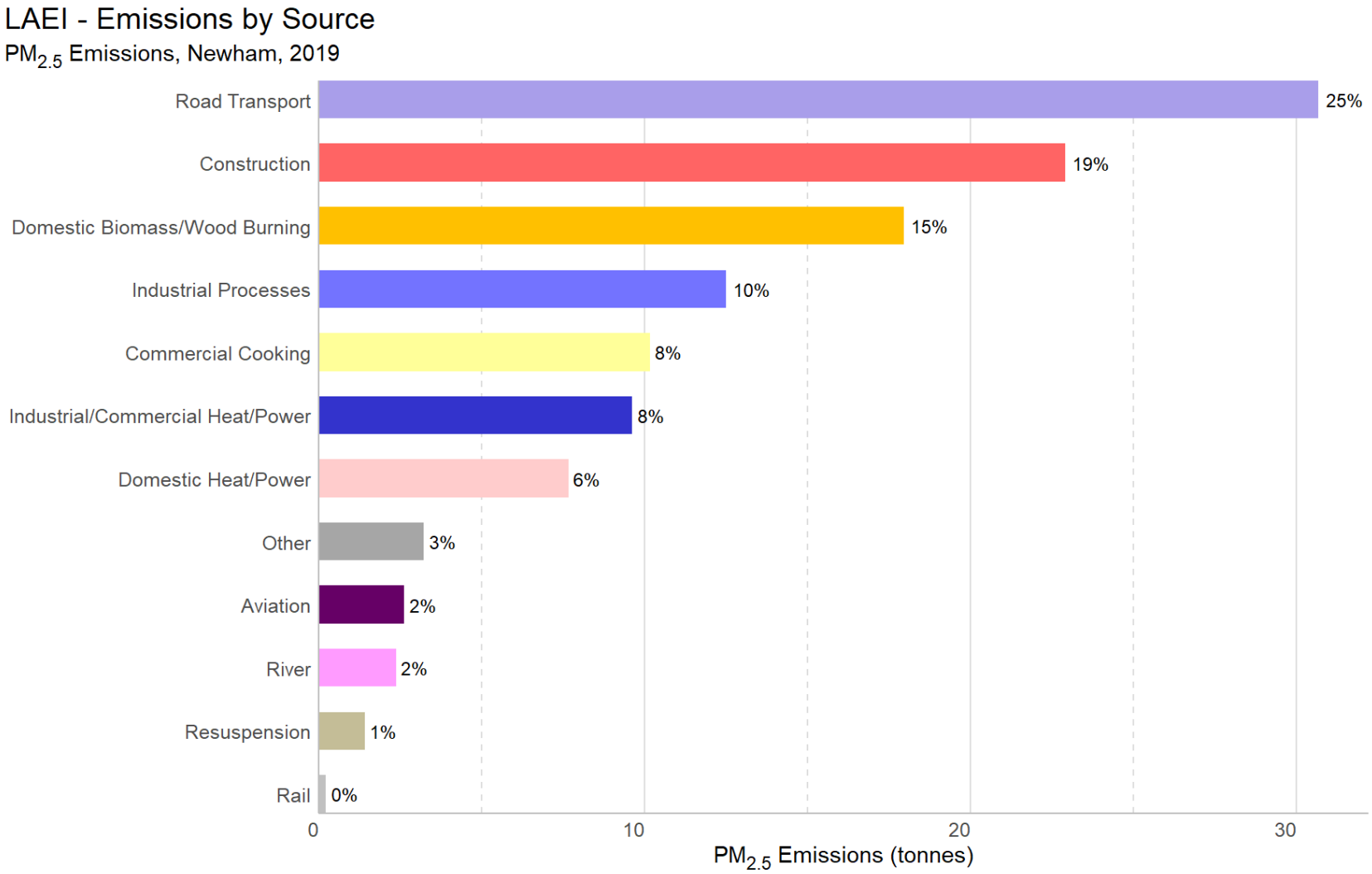


Source: Strategic Analysis, TfL City Planning

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PM2.5 EMISSIONS BY SOURCE 2019

Newham London



Source: Strategic Analysis, TfL City Planning

WE ARE NEW

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POLLUTION MONITORING IN NEWHAM

There are various different monitors sampling air quality in Newham. Full details can be found in Newham's air quality webpages

Newham operates three real time monitoring stations, measuring NO_2 and PM2.5. London City Airport have three measuring NO_2 at two locations and PM2.5 and PM10 at another location. TfL operate two in association with the Silvertown Tunnel Project, one monitoring NO2 and PM2.5 and another PM10.

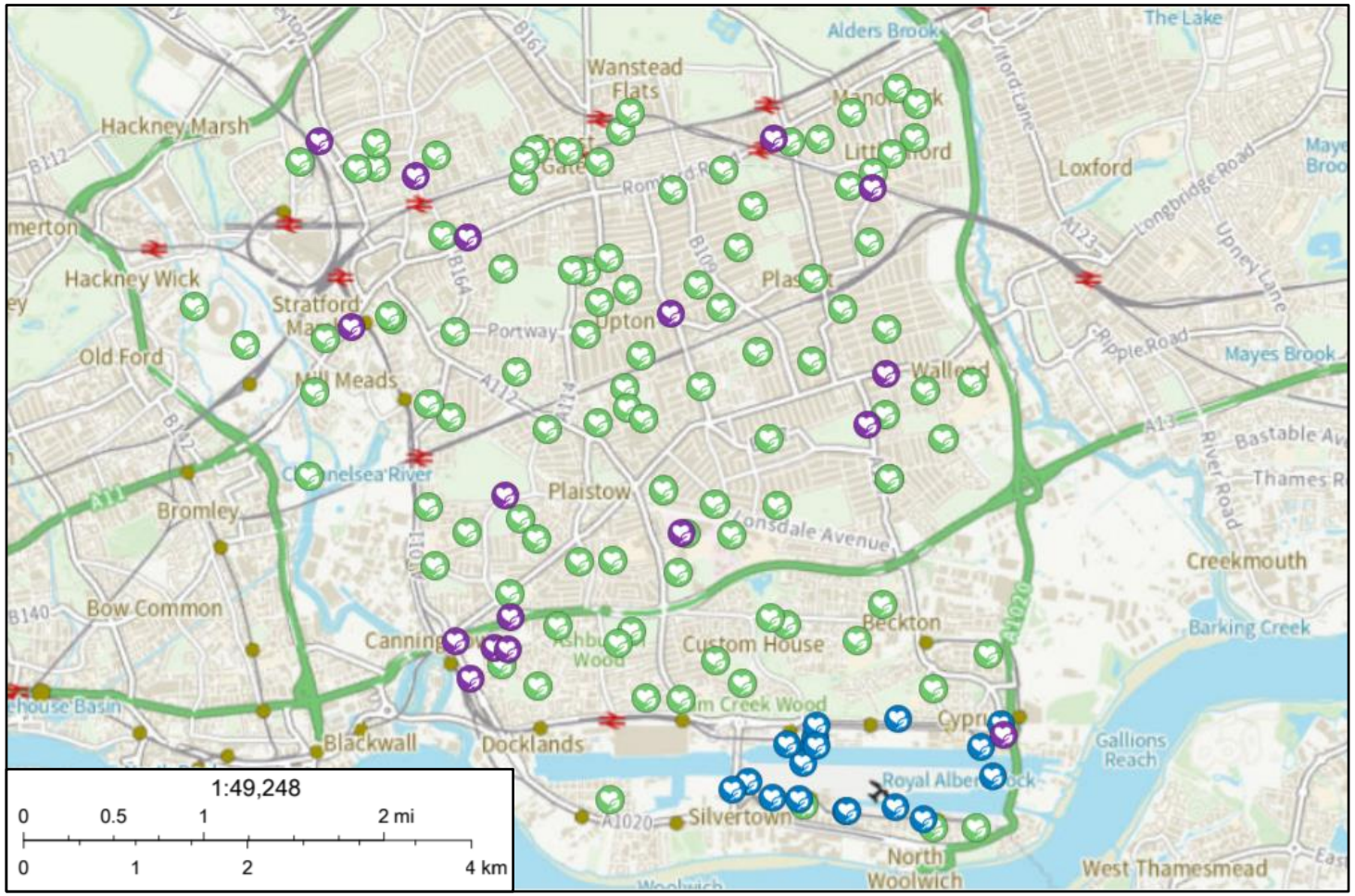
'Low cost' monitors (note 'low cost' means £4,000 to £5,000 purchase price with running costs). There are four Breathe London www.breathelondon.org monitors in Newham plus 26 Zephyr monitors and 8 Aadra monitors.

NO2 diffusion tubes. These measure on a monthly basis. There are:

- 99 diffusion tubes outside Newham schools
- 16 long term sites at various locations
- 16 sites operated by London City Airport

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DIFFUSION TUBE MONITORING NETWORK



Key:

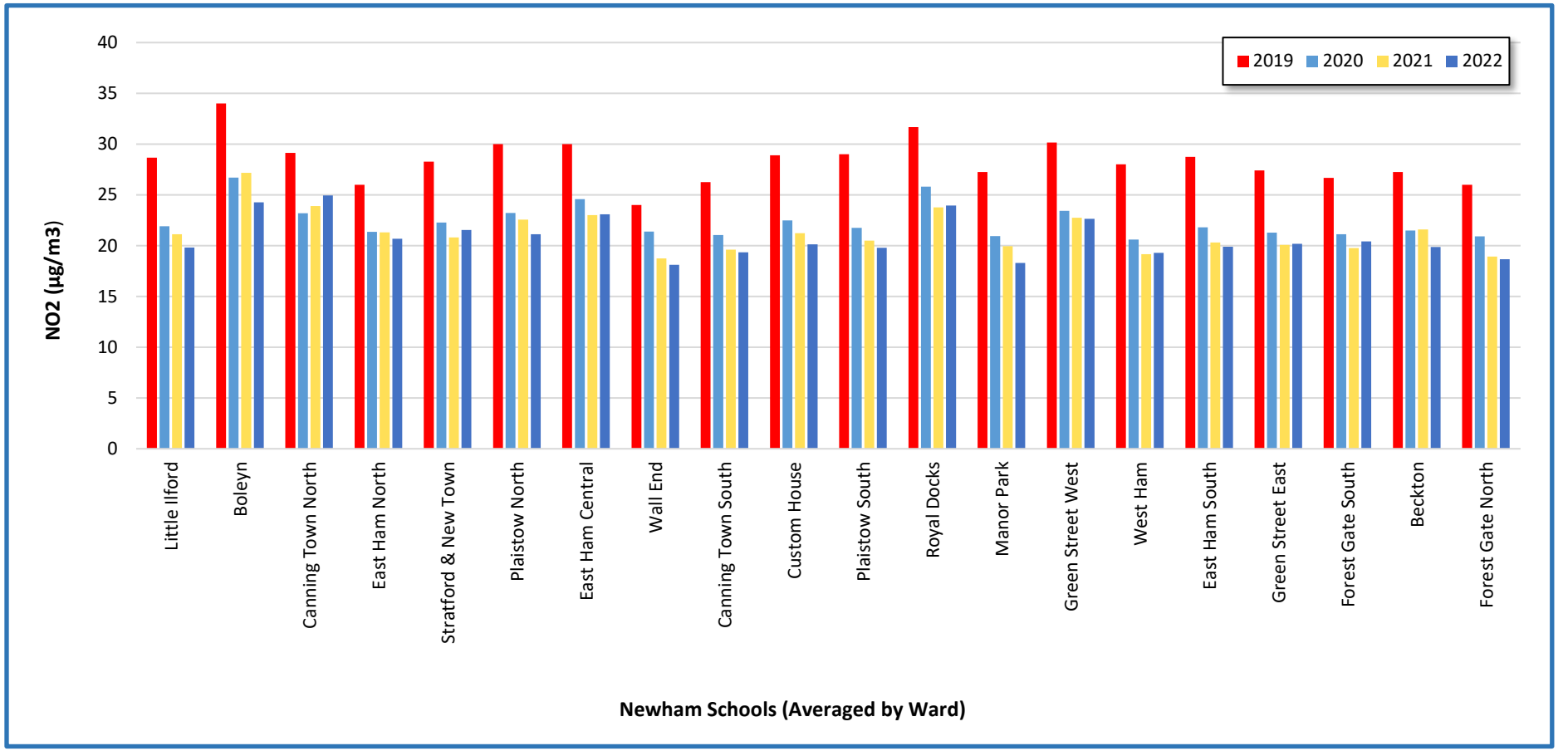
- School Sites
- London Wide Environment Program
- London City Airport

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4 YEAR TREND AT 99 SCHOOLS IN NEWHAM (NO2 CONCENTRATIONS AVERAGED BY WARD)



WE ARE NEWHAM.

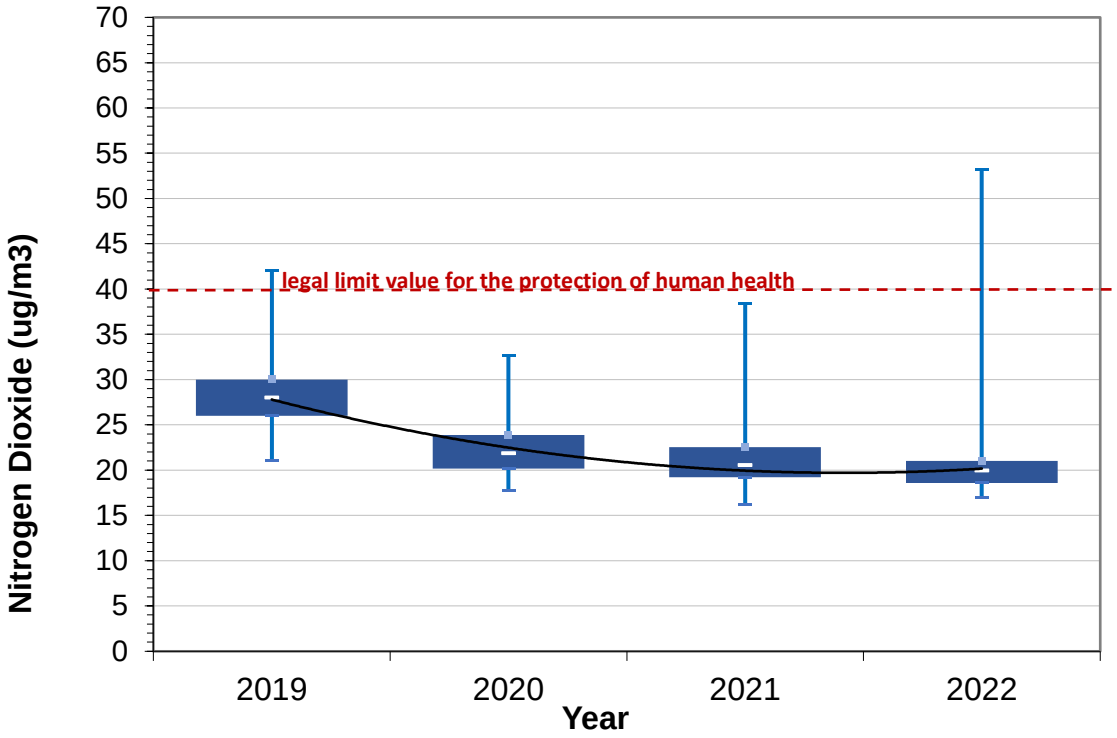
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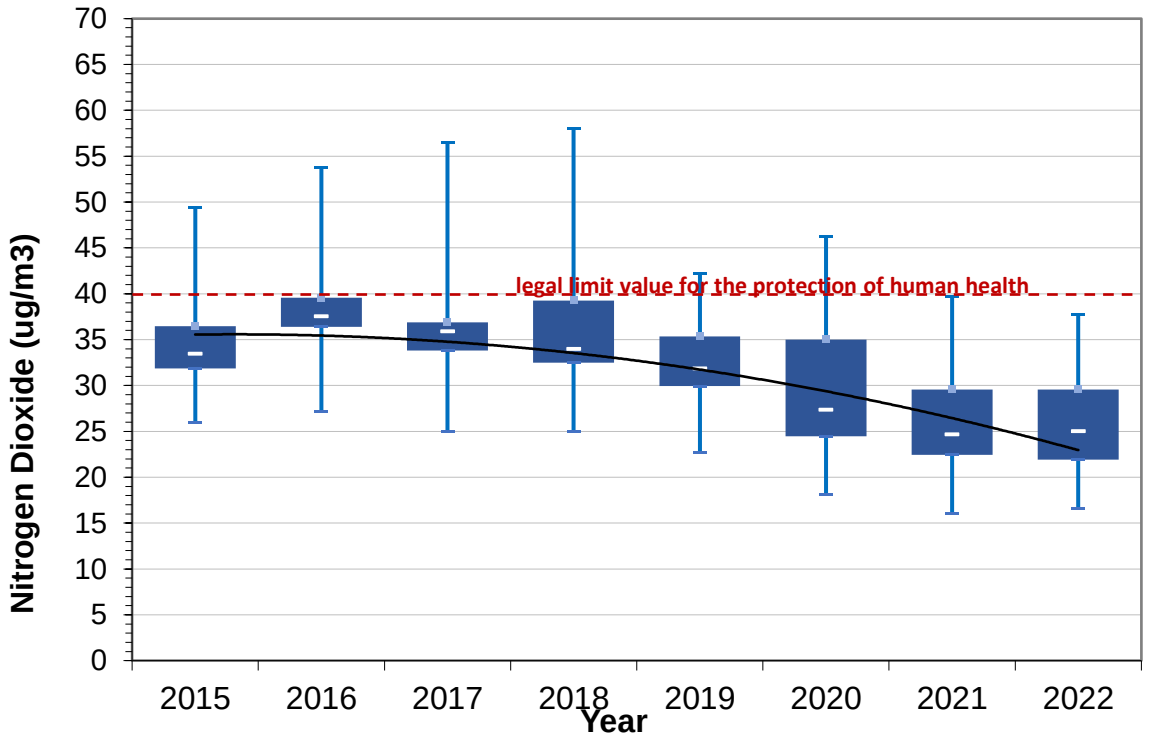
ANNUAL TREND IN NO2 CONCENTRATIONS

Newham London

Four Year Trend at all 99 Schools



Eight Year Trend at all 16 DEFRA reported sites



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PROJECT AND PROGRAMMES TO ADDRESS AIR POLLUTION

Newham London

Smoke Control Area for the whole borough under consultation until 30th April. Barring any objections, the new Order will come into effect on 15th September 2023

Newham subscribe to the airText service, allowing Newham residents to sign up and receive air quality forecasts, identifying periods of moderate, high or very high pollution levels.

From October 2023 we are introducing the Zero Carbon Schools programme to support schools in reducing their carbon emissions and improve air quality. Over the course of 26 weeks students will learn about the climate crisis and have a chance to respond by designing and leading a project to reduce their school's carbon footprint, focusing on energy, transport, food and purchasing.

Community Energy pilot in Newham. The technical feasibility studies for 6 identified sites were paid by the GLA's Community Energy Grant. The installation has the potential to

- Generate 579,125 kWh of renewable electricity every year, equivalent to powering 215 London homes.
- Save 122 tonnes of CO2 emissions every year
- Create estimated annual savings of ~ £4,595
- Create a combined community fund of ~ £300,00 over the 20-year life of the project

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PROJECT AND PROGRAMMES TO ADDRESS AIR POLLUTION

Newham London

- Eco mooring project for canal boats under consideration, with funds available from Section 106 allocated funds.
- Non Road Mobile Machinery (NRMM) emissions from construction sites makes up a substantial part of PM in London. Newham subscribes to a London-wide scheme to inspect construction sites, to ensure machinery is compliant with required standards.
- Nature-Friendly Schools programme. The purpose of this programme is to address issues surrounding lack of access to green spaces and look at ways in which the schools could be improved to become healthier and more environmentally-friendly spaces. The programme aims to bring children closer to nature, and in turn benefit their learning, health and wellbeing.
- DEFRA programme to improve the dissemination of air quality information.

HIGHWAYS AND SUSTAINABLE TRANSPORT

Newham London

- Healthy Route Maps (pilot) showing how to get to school whilst avoiding the most polluted areas.
- Low Traffic Neighbourhoods (LTN). These eliminate through traffic from neighbourhoods in the borough and enable and encourage more walking and cycling. 30 out of 65 eligible areas are LTNs in Newham (or around 40% coverage of all eligible streets: with five further schemes in development. Monitoring has shown a reduction in air pollution where LTNs have been set up. Low Traffic Neighbourhoods – Newham Council
- Cycle Network Development to enable modal shift: Works are underway on a number of strategic cycleway schemes including the Royal Docks Corridor (Silvertown Way and North Woolwich Road), Romford Road, the Newham Greenway, and Mitchell Walk; and design work progressing on a large number of other routes including Westfield Avenue, Leyton Road, Leytonstone Road, Honour Lea Avenue, Celebration Avenue, Penny Brookes Street, Liberty Bridge Road, Pool Street, Woolwich Manor Way and Barking Road.
- Participation in STARS scheme to encourage active travel to school School travel plans – Newham Council with a new dedicated member of staff in place to engage with schools on their sustainable travel initiatives.

HIGHWAYS AND SUSTAINABLE TRANSPORT

Newham London

- Emission based parking charges: Introduced from 6th January 2021, with charges based on individual vehicle CO2 emissions. Emissions based charging – Newham Council This will be supplemented further with the introduction of emissions-based pay-by-phone charges for kerbside visitor parking across the borough in Spring 2023
- Electric Vehicle Charging points Electric vehicle charging points – Newham Council
- Existing 80 free-standing pillar charging units available on street for residents 60 lamp column chargers
- 200 double-charging units provide via Uber funding to be delivered by June 2023
- ORCS bid for a further 120 residential chargers for submission to ORCS by April 2023 (funding not yet confirmed)
- Council property partners are also engaging with rapid charge point providers to identify Council land adjacent to highways where small charging hubs can be implemented by means of a long-term land lease to the operator.

PLANNNING AND DEVELOPMENT

- Produced Travel Plan Guidance for major developments to encourage sustainable travel newham-travel-plan-guidance-2022
- The Local Plan is being refreshed to include more pollution and climate-friendly objectives

COUNCIL FLEET

- Plan to either electrify our vehicle fleet or move away from diesel as a fuel by 2030
- The Council's Fleet now consists of 39 fully electric vehicles.
- Replaced our existing van fleet with 135 mild hybrid vehicles & operate all our vehicle fleet on gas-to-liquid fuel (not conventional diesel).
- Replacing our existing refuse fleet vehicles & although they are not fully electric, they will have fully electric bin lifting equipment.
- Installed additional charging units in our Folkestone Road Depot.
- Green Fleet Management will identify and rectify driver behaviour, areas such as carbon footprints, idling, and speeding will be monitored for all council vehicles. This will be achieved through a telematics system for all new vehicles.

HOUSING

- Promoting & delivering energy efficiency & energy supply retrofit projects in workplaces & homes. These include the London Community Energy Fund; Social Housing Decarbonisation Fund; Eco4 Funding & Home Upgrade Grant, Doctor Green
- Private Sector Housing are enforcing better insulation in rented homes and providing grants to improve insulation.

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PUBLIC HEALTH 50 STEPS AND PRIORITIES

Newham London

Priority 1:
Enabling the best start through pregnancy and early years

Priority 2:
Supporting our young people to be healthy and ready for adult life

Priority 3:
Supporting people around the determinants of their health

Priority 4:
Developing high quality inclusive services, ensuring equity and reducing variation

Priority 5:
Meeting the needs of those most vulnerable to the worst health outcomes

Priority 6:
Creating a healthier food environment

Priority 7:
Supporting active travel and improved air quality

Priority 8:
Creating an active borough

Priority 9:
Supporting a Newham of communities where people are better connected and supported

Priority 10:
Working towards a smoke free Newham

Priority 11:
Building a borough of health promoting housing

Priority 12:
Building an inclusive economy and tackling poverty

The 50 steps strategy consists of 12 main priority areas.

Our 50 steps is a call to action to ourselves as the Health and Wellbeing Board for Newham and to the wider borough to draw on the amazing assets and opportunities we have locally.

BUILDING A FAIRER NEWHAM

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PRIROTIES WITH STEPS FOCUSING ON AIR QUALITY AND CLIMATE

Newham London

PRIORITY 6: CREATE A HEALTHIER FOOD ENVIRONMENT

Step 26: Change the borough's food culture through a Newham Food Partnership and become a Sustainable Food City.

PRIORITY 7: SUPPORTING ACTIVE TRAVEL AND IMPROVED AIR QUALITY.

Step 28: Prioritise actions such as active travel and encouraging use of green spaces to support Climate Now.

Step 29: Work in partnership to ensure all residents have access to high quality, green and active spaces in the borough.

Step 30: Challenge major employers and new developments in the borough to lead by example on Active Travel.

Step 31: Bring a public health approach to shaping Healthier Places and Healthy Streets in our communities.

Step 32: Support Schools to be 'Active Travel Beacons'.

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PRIROTIES WITH STEPS FOCUSING ON AIR QUALITY AND CLIMATE

Newham London

PRIORITY 8: SUPPORTING AN ACTIVE BOROUGH

Step 33: Develop and promote a universal offer of sport and physical activity for residents in Newham.

Step 34: Develop an inclusive programme for the least active adults to participate in sport and physical activity.

Step 35: Increase participation of children and young people in physical activity and sport.

Step 36: Support place shaping for physical activity, including leisure infrastructure and the wider environment.

PRIORITY 10: WORKING TOWARDS A SMOKE FREE NEWHAM

Step 41: Make Newham tobacco free by 2030

Step 42: Provide access to high quality support to quit smoking

HOW ARE WE RESPONDING?

Newham Council PH Team

Newham Climate Emergency Action Plan: carbon neutral by 2030; net zero greenhouse gas emissions by 2050

50 Steps to a Healthier Newham Strategy (2020-23)

Development of a climate action working group

Climate Adaptation Needs Assessment

NHS LBN Climate Partnership

Healthy Schools

NEL ICS

NEL ICS Green Plan (2022-25), addressing…

- Estates & facilities
- Adaptation
- Supply chain & procurement
- Medicines
- Travel and transport
- Workforce
- Food & nutrition
- Green spaces & wellbeing
- Digital transformation
- Models of care

NUH

NUH Green Plan

ELFT

ELFT Green Plan

Barts

Barts Green Plan

Hospital Clean Air Framework