AIR QUALITY ACTION PLAN
2025 – 2030

(Cover art, formatting and design to be completed.)

What is this document?

This is a two-part document which sets out Hammersmith & Fulham's Council approach for improving air quality and protecting health from exposure to air pollution in Hammersmith & Fulham.

The first part of this Air Quality Action Plan (AQAP) sets out why tackling air pollution is a key priority for the Council. It explains why air pollution is so harmful to our health, where pollution comes from, how it has changed in the borough over time, and what actions we have taken to date to improve the quality of the air we all breathe. The second part is the Action Plan matrix, which sets out the actions and policies which will be undertaken in the next five years to reduce air pollution across the borough.

This document goes far beyond the legal requirements for councils on air quality, by committing Hammersmith & Fulham to more ambitious WHO (2021) air quality standards and including actions to tackle pollution from new sources not usually addressed by local authorities, such as indoor air pollution.

Why does this document matter to you?

- Everyone is affected by air pollution – clean air is important for us all.
- This Air Quality Action Plan 2025-2030 sets out what H&F Council and our partners will do to improve air quality over the next five years.
- This Plan also gives you information and suggestions for you, to help you do you bit by reducing emissions in your daily life, as well as helping you protect your own health by avoiding harmful pollution.
- This means this AQAP is for everyone, whether you live in, work in, go to school in, or simply visit Hammersmith & Fulham.

As this is a statutory document, there is a lot of information in this Action Plan. The contents page below can help guide you to find the information that you need.

This AQAP was prepared by the Air Quality Team of Hammersmith & Fulham Council with the support and agreement of departments across the Council. Following a public consultation, and GLA review this AQAP has been approved by the Leader of the Council and the Cabinet of Hammersmith & Fulham Council.

This AQAP will be subject to an annual review, appraisal of progress and reporting to the relevant Council Committee. Progress each year will be reported in the Annual Status Reports produced by Hammersmith & Fulham, as part of our statutory London Local Air Quality Management duties.

If you would like to contact us about this document, please get in touch with our Air Quality Team at:

Air Quality
Hammersmith & Fulham Council
King Street
Hammersmith
W6 9JU
Email: *AQAP*@lbhf.gov.uk

Contents

Foreword 4
EXECUTIVE SUMMARY 5
Abbreviations 7
Introduction and structure of this Action Plan 8
1. Air Quality in context 12
2. Summary of current air quality in Hammersmith & Fulham 17
2.1 AQMAs and Focus areas 20
2.2 Sources of Pollution in Hammersmith & Fulham 21
3. Our achievements and progress so far 25
4. The Air Quality Action Plan Matrix 28
4.1 Consultation and Stakeholder Engagement 28
4.2 Steering Group 28
4.3 AQAP Progress 29
5. Further information and guidance 86

Foreword

Leader of the council

Hammersmith & Fulham sits in the basin of the Thames Valley. On some days the air quality is perilous.

Dirty air causes cancer, strokes, heart disease and dementia. It is particularly bad for young children, causing a detrimental effect on brain development, stunted lungs and damage to developing organs.

It is bad for the old, and those with pre-existing health conditions. It disproportionately affects vulnerable people, poorer people, and those from Black, Asian, and Minority Ethnic groups.

Nobody would willingly drink a glass of dirty water. Yet roughly 18 times each minute we do just that. We breathe in contaminated, poisonous air.

Pollution comes from the vehicles on our roads, the gas boilers in our buildings, the dust from construction and development work across our borough and beyond.

There is no safe level of air pollution, and that is why we in H&F have committed to meeting the World Health Organisation 2021 guideline values for air quality by 2030 - which are far more ambitious than those set out for us by central government.

We cannot just focus on the outside world. Indoor air pollution is a newer concern – air indoors can be as polluted as outdoors.

This action plan rises to the new challenge, committing us to tackle pollution inside our homes and offices and schools. This year we launched our first school streets and are committed to rolling this programme out across the borough.

Tackling dirty air and our ambitions for a net zero by 2030 go hand in hand. Reducing carbon emissions, improving biodiversity and ecology across the borough, and improving the quality of our air are all key priorities for the council.

To measure the effects of the actions we're taking, we have installed the largest hyper local Breathe London air quality monitoring network in London.

That has enabled us to see how pollution has dropped in the Clean Air Neighbourhood streets of South Fulham where commuter traffic has been removed.

Finally, we know that we cannot tackle this issue alone. Our New Better Air Better Health partnership brings us together with our partners in healthcare, academia and beyond. We want to show leadership, to inspire and encourage action from everyone in the borough.

Only by residents, community groups, schools, businesses, universities and hospitals working together, can we improve the air we breathe and the health and wellbeing of everyone who lives in, works in, or visits our great borough.

Cllr Stephen Cowan, Leader of Hammersmith and Fulham Council
Dr Nicola Lang, Director of Public Health

EXECUTIVE SUMMARY

Our new Air Quality Action Plan 2025-2030 sets out Hammersmith & Fulham's vision for a borough with cleaner air, and improved health and wellbeing for all. It is part of the Council's Climate and Ecological Strategy 2021-2030.

This plan will help us protect the health and wellbeing of the people who live, work in and visit the borough from the effects of air pollution, and to promote healthy living by protecting children and families from filthy air.

Air pollution affects all of us before we are even born to our last years. Young or old, in good health or with existing health issues. Improving air quality is a key priority for the council as part of its commitment to improving the environment and our commitment to public health and wellbeing, and this Air Quality Action Plan (AQAP) sets out what we are going to do and achieve in the next five years to make our vision of a cleaner, healthier borough a reality.

As well as affecting our health, air pollution damages the economy, increasing sick days and illnesses as well as being a burden on the NHS and our social care systems.

This AQAP has been produced as part of our duty to London Local Air Quality Management (LLAQM). It builds upon our past successes and outlines the further actions we will take to improve air quality in Hammersmith & Fulham between 2025-2030. This document fulfils our statutory obligations, but it also goes further, because air pollution can still damage our health even at very low concentrations.

As a result, as a Council we are committed to meeting the World Health Organization Air quality (2021) guidelines for the air pollutants Nitrogen Dioxide (NO_2) and Particulate Matter (PM_{10}, $PM_{2.5}$) by 2030 – making this Action Plan an ambitious document, where bold action can equal hugely positive impacts.

Tackling air pollution is something that we as a council cannot do alone. This Action Plan sets out how we will partner with experts (such as the NHS and Imperial College through our Better Air Better Health partnership), work with and lobby central government and the Mayor of London and help empower our communities to make changes to both reduce their own emissions but also reduce their exposure to harmful air pollution.

The purpose of this plan is to protect the health and wellbeing of the people who live, work in and visit the borough from the effects of air pollution. It also supports our aim of being the greenest local authority in the country.

We have the following overarching goals:

- **Tackling the sources of pollution that the council can control** – for example from our own properties and fleet and through our planning policies, our transport polices, highways works and maintenance.
- **Raising residents' and businesses' awareness** of what they can do to reduce their own emissions and how to avoid exposing themselves to existing pollution.
- **Lobbying the government** to make the changes needed to improve air quality across the country.
- **Working with the Greater London Authority (GLA) and Transport for London (TfL)** to make the improvements needed to reduce pollution in the borough and across London.

To achieve this, we have the following priorities:

1. Provide the necessary infrastructure to enable more **active travel, such as walking, wheeling, and cycling**.

2. The development of **Clean Air Neighbourhood projects**, including tree planting, sustainable drainage systems and **traffic and pollution reduction measures**, where supported by residents.

3. Working collaboratively with our partners and stakeholders on innovative policies and projects. Our **Better Air, Better Health partnership, with Imperial College London and Imperial College Healthcare NHS Trust**, is one example of bringing together the public sector with world-class academics and healthcare professionals to jointly tackle the issue of air pollution in new and exciting ways.

4. Support residents and businesses to adopt **car-sharing and clean vehicles**, utilising our dense electric vehicle charging network. Our **Net Zero 2030 Parking Strategy** will support our promotion of low emission vehicles and **encourage active travel across the borough**.

5. Reduce building emissions by replacing older boilers with **clean heat networks and heat pumps**, raising residents' and businesses' awareness of this air pollution source and how they may upgrade to **cleaner zero emission heat and power sources**, and using the planning system to regulate the installation of new energy plant.

6. Tackling **pollution at schools**, as well as **journeys to and from**, by making local improvements and raising awareness of **cleaner walking routes**. Implementing a rolling programme of **school streets plus projects** across the borough, while also delivering other projects such as **green barriers**, sustainable drainage systems and more around our schools.

Abbreviations

AQAP	Air Quality Action Plan
AQMA	Air Quality Management Area
AQO	Air Quality Objective
BEB	Buildings Emission Benchmark
CAB	Cleaner Air Borough
CAZ	Central Activity Zone
CHP	Combined Heat & Power
EST	Energy Saving Trust
EV	Electric Vehicle
GLA	Greater London Authority
GULCS	Go Ultra Low City Scheme
HGV	Heavy Goods Vehicle
LAEI	London Atmospheric Emissions Inventory
LAQM	Local Air Quality Management
LGV	Light Goods Vehicle
LLAQM	London Local Air Quality Management
NICE	The National Institute for Health and Excellence
NRMM	Non-Road Mobile Machinery
OLEV	Office for Low Emission Vehicles
PM_{10}	Particulate matter less than 10 micron in diameter
$PM_{2.5}$	Particulate matter less than 2.5 micron in diameter
SPD	Supplementary Planning Document
SPG	Supplementary Planning Guidance
STARS	Sustainable Travel: Active, Responsible, Safe
TEB	Transport Emissions Benchmark
TfL	Transport for London

Introduction and structure of this Action Plan

This report outlines the actions that Hammersmith & Fulham Council will deliver between 2025 - 2030 to reduce concentrations of pollution, and exposure to pollution; thereby positively impacting on the health and quality of life of residents and visitors to the borough.

It has been developed in recognition of the legal requirement on the local authority to work towards air quality objectives under Part IV of the Environment Act 1995 and relevant regulations made under that part and to meet the requirements of the London Local Air Quality Management statutory process[1].

Air pollution is the largest environmental threat to public health in the UK, and up to 36,000 premature deaths each year are attributable to air pollution exposure – that's 20 times more than the number of deaths caused by road traffic collisions. **Hammersmith & Fulham is the tenth worst local authority in England for air pollution** - with **7.4% of deaths in 2022 linked to toxic air**, according to Public Health England[2].

Air pollution carries a huge cost for our health and social care systems; if strong action isn't taken, this is estimated at approximately £5.4bn by 2035, rising to over £18.5bn when costs for diseases and poor health with less robust evidence are included[3].

Finally, air pollution damages the economy through lost productivity and poor health. Defra commissioned research concluded that air pollution costs the UK economy £2.7 billion each year[3].

The impacts of air pollution are severe and far-reaching, but we're not all affected equally. The risk to our health is a result of our existing health circumstances and the extent to which we are exposed to polluted air. People with health vulnerabilities or increased exposure to air pollution are therefore more likely to experience adverse health outcomes from air pollution. Air pollution also has a disproportionate and inequitable impact upon socio-economically deprived communities and Black, Asian and minority ethnic populations[4].

Tackling air pollution is not something we alone can do as a council. While we will take all the action we can, we also need to partner with and lobby for more action by others, and we also need to empower our communities to take action. Our Better Air Better Health partnership with Imperial College London and Imperial College Healthcare NHS Trust is one example of how we will bring together world-class experts to help us tackle this problem. Encouraging behaviour change is not easy, but we as a council are committed to helping residents, workers and visitors across our borough to breathe cleaner and safer air.

We have the following overarching goals:

[1] LLAQM Policy and Technical Guidance | https://www.london.gov.uk/what-we-do/environment/pollution-and-air-quality/working-boroughs

[2] Fraction of mortality attributable to particulate air pollution (new method) in H&F | Fingertips - Public Health Data 2023| Department of Health and Social Care (phe.org.uk)

[3] Valuing the impacts of Air Quality on Productivity | Ricardo AEA | 1511251135_140610_Valuing_the_impacts_of_air_quality_on_productivity_Final_Report_3_0.pdf (defra.gov.uk)

[4] Greater London Authority air quality exposure and inequalities study 2023 | Air Pollution and Inequalities in London - update 2023 | London City Hall

- Tackling the sources of pollution that the council can control – for example from our own properties and fleet and through our planning policies, our transport polices, highways works and maintenance.

- Raising residents' and businesses' awareness of what they can do to reduce their own emissions and how to avoid exposing themselves to existing pollution.

- Lobbying the government to make the changes needed to improve air quality across the country.

- Working with the GLA and TfL to make the improvements needed to reduce pollution in the borough and across London.

To achieve this, we have the following priorities:

- Provide the necessary infrastructure to enable more **active travel**, such as **walking, wheeling, and cycling**.

- The development of **Clean Air Neighbourhood projects**, including tree planting, sustainable drainage systems and **traffic and pollution reduction measures**, where supported by residents.

- Working collaboratively with our partners and stakeholders on innovative policies and projects. Our **Better Air, Better Health partnership**, with Imperial College London and Imperial College Healthcare NHS Trust, is one example of bringing together the public sector with world-class academics and healthcare professionals to jointly tackle the issue of air pollution in new and exciting ways.

- Support residents and businesses to adopt car-sharing and cleaner vehicles, utilising our dense electric vehicle charging network. Our **Net Zero 2030 Parking Strategy** will support our promotion of low emission vehicles and **encourage active travel across the borough**.

- Reduce building emissions by replacing older gas boilers with **clean heat networks and heat pumps**, raising residents' and businesses' awareness of this air pollution source and how they may **upgrade to cleaner heat and power sources**, and **using the planning system to regulate the installation of new energy plant**.

- Tackling **pollution at schools**, as well as journeys to and from our schools, by making local improvements and **raising awareness of cleaner walking routes**. Implementing a **rolling programme of school streets projects across the borough**, while also delivering other projects such as **green barriers**, sustainable drainage systems and more around our schools.

We have developed actions that can be considered under seven broad topics:

- **Monitoring and other core statutory duties**: maintaining monitoring networks is critical for understanding where pollution is most acute, and what measures are effective to reduce pollution. There are also several other very important statutory duties undertaken by boroughs, which form the basis of action to improve pollution.

- **Localised solutions**: where supported by residents, these seek to promote healthy living and improved air quality through Clean Air Neighbourhood measures including: traffic and pollution reduction trials, sustainable drainage systems, tree planting, school streets initiatives and improved infrastructure for walking and cycling;

- **Emissions from developments and buildings**: it is modelled that emissions from buildings will soon overtake transport emissions as the single biggest source of NOX emissions in the borough. Tackling emissions from buildings also results in co-benefits to our work reducing carbon emissions across H&F.

- **Public health and awareness raising**: increasing awareness can drive behavioural change to lower emissions as well as to reduce exposure to air pollution. This is a key driver of our Better Air Better Health partnership with academic and NHS experts.

- **Delivery servicing and freight**: vehicles delivering goods and services are usually light and heavy-duty diesel-fuelled vehicles with high primary NO_2 emissions.

- **Borough fleet actions**: our fleet includes light and heavy-duty diesel-fuelled vehicles such as minibuses and refuse collection vehicles with high primary NO_2 emissions. Tackling our own fleet means we will be leading by example.

- **Cleaner transport**: road transport is the main source of air pollution in London. We need to incentivise a change to walking, cycling and ultra-low emission vehicles (such as electric) as far as possible.

Our priorities are to tackle the sources of emissions that the council has control over, raising public awareness of air pollution, and lobbying the government to make the necessary widespread changes needed to improve air quality.

You will see in this report that we have worked hard to engage with stakeholders and communities which can make a difference to air quality in the borough. We would like to thank all those who have worked with us in the past and we look forward to working with you again as well with new partners as we deliver this new action plan over the coming years.

In this AQAP we outline how we plan to effectively use local levers to tackle air quality issues within our control.

However, we recognise that there are many air quality policy areas that are outside of our influence (such as Euro vehicle standards, national vehicle taxation policy, taxis and buses), and so we will continue to work with and lobby regional and central government on policies and issues beyond Hammersmith & Fulham council influence.

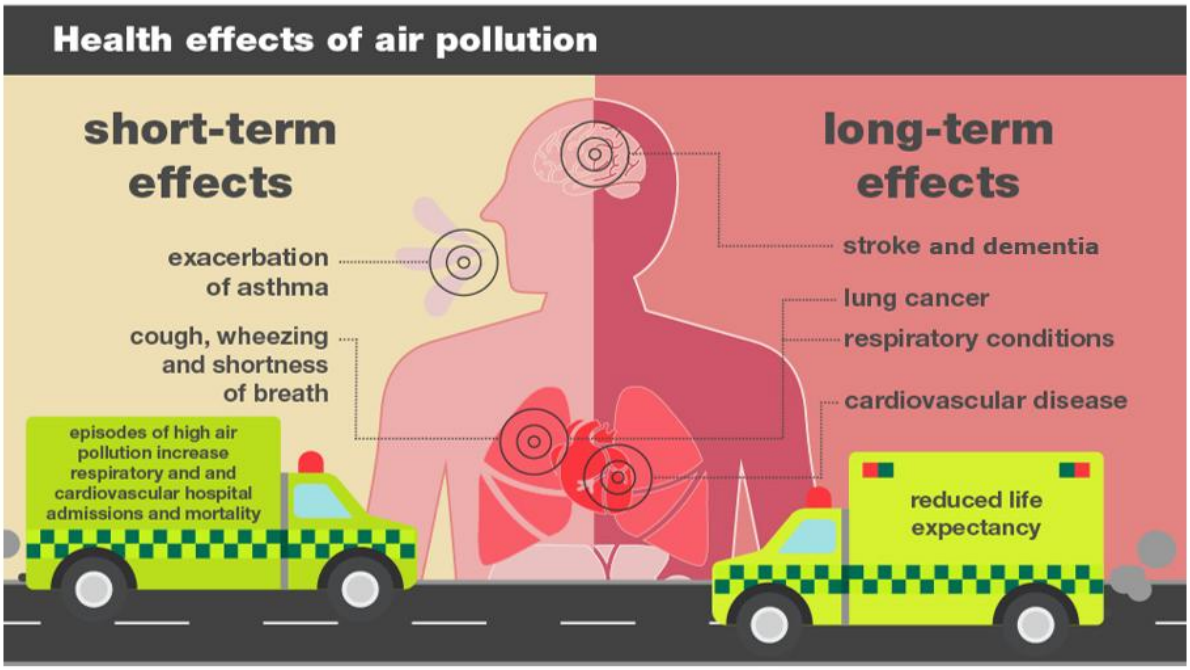
Structure of the Hammersmith & Fulham Air Quality Action Plan 2024-29
Chapter 1: Air Quality in Context Why we have introduced this new Action Plan. This includes a section of the impacts of air pollution on health, our statutory duties on air quality, and the links between air quality and our other crucial work on climate change and ecology.
Chapter 2: Air Quality in Hammersmith & Fulham Where pollution in Hammersmith & Fulham comes from, how it has changed over time, and how we monitor, measure and model air pollution in the borough.
Chapter 3: What we have achieved so far A summary of some of the achievements and successes in improving air quality in the borough over the last five years.
Chapter 4: The next five years – the Action Plan Matrix The actions, outcomes, policies and projects that we are committing to undertaking during the lifetime of this Action Plan to help improve the health and wellbeing of everyone who lives in, works in, or visits Hammersmith & Fulham.
Chapter 5: Further information More information and links to further reading and guidance on this topic. This includes a summary of actions you can take right now if you are a resident, business or school.

1. Air Quality in context

Air Pollution and Health

Air pollution is associated with many **adverse health impacts**, both **short term** and **long-term** effects as shown in Figure 1 below. Air pollution is recognised as a **contributing factor** in the onset of **heart disease and cancer**. Additionally, air pollution is increasingly being linked to a huge variety of other adverse health impacts, from **brain diseases** to **stress** and **mental health** issues.

Figure 1: Health Impacts of Air Pollution



(Adapted from UK Health Security Agency,2023)

Air pollution and inequalities

Air pollution does not affect everyone equally. Although we are all at risk, some groups are exposed to higher levels of air pollution and others are more vulnerable to the health damage from pollution exposure. In this way, air pollution has an inequitable health burden.

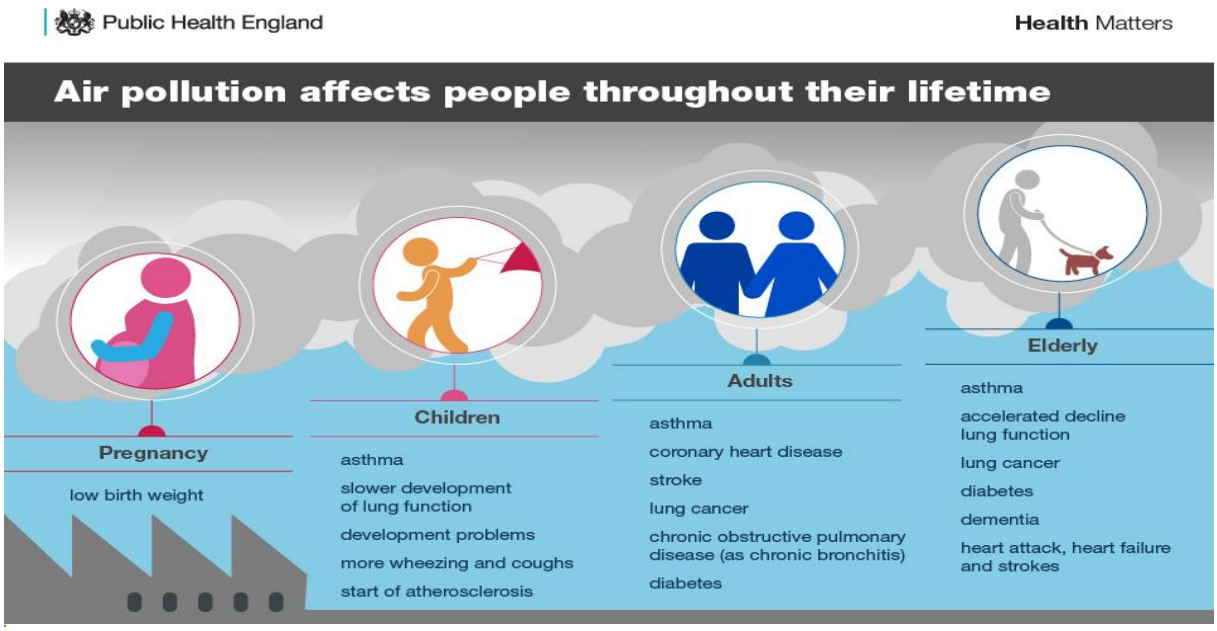
Air pollution particularly affects the most **vulnerable in society**: **children** and **older people**, and **those with heart and lung conditions**.

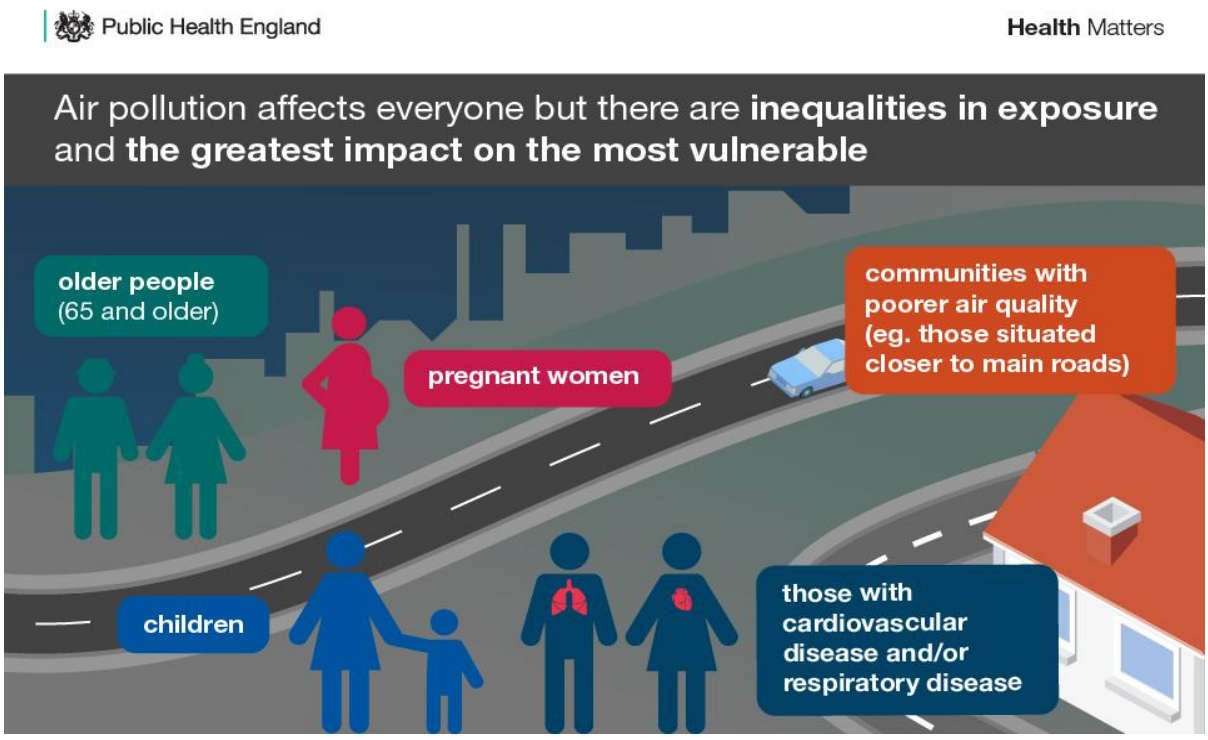
There is also often a strong correlation with equalities issues because areas with poor air quality are also often the less affluent areas. Air pollution also has a disproportionate and inequitable impact upon socio-economically deprived communities and Black, Asian and minority ethnic populations. Data from the Mayor of London shows that Black, Asian and minority ethnic populations are exposed to higher NOx concentrations[5].

[5] Greater London Authority air quality exposure and inequalities 23 | Air Pollution and Inequalities in London - update 2023 | London City Hall

The Royal College of Paediatrics and Child Health published a Position Statement on Air Pollution in the UK in September 2024. It confirmed that children are especially vulnerable to air pollution because they inhale more air than adults in proportion to their body weight, breathe closer to ground-level sources of air pollution such as vehicle exhausts, and are less able to control their exposure than adults.

Figures 2 & 3 – Additional health impacts of air pollution





(Adapted from UK Health Security Agency,2023)

Poor air quality has a significant negative impact on human health and a 2019 Imperial College London report “London Health Burden of Current Air Pollution and Future Health Benefits of Mayoral Air Quality Policies” shows an estimated 82 deaths to be attributable to air pollution in the borough in 2019. In 2019 in Greater London, the equivalent of between 3,600 and 4,100 deaths were estimated to be attributable to human made $PM_{2.5}$ and NO_2.

Public Health England has identified the fraction of all-cause adult mortality attributable to $PM_{2.5}$ as one of its key indicators within the Public Health Outcomes Framework which in Hammersmith and Fulham 7.4% based on 2022 values (down from 7.9% in 2010). This makes our borough the tenth worst local authority in England for air pollution.

In respect to air pollution and respiratory health in patients with COPD a recent study[6] in 2024 found that exposure for a group of COPD patients in London to pollution from sources within a patient's home, such as cooking and heating, showed stronger effects on exacerbation than sources from outdoors, with nitrogen dioxide being particularly harmful. In the report's conclusions it was noted indoor-generated and outdoor-generated pollution can deteriorate COPD patients' health and the importance of decreasing exposure equally to both source types to decrease risk of exacerbation.

A global study of cases of Asthma published in November 2024[7] found that long-term exposure to ambient $PM_{2.5}$ significantly increases the risk of asthma, and the increased risk not only presents in children but also in adults. In 2019, nearly one-third of the global asthma cases were associated with $PM_{2.5}$ exposure. It found that for every 10 mg/m^{-3} increment in $PM_{2.5}$, the risk of childhood and adult asthma (i.e., prevalence, incidence, and mortality of all asthma types) increases by 21.4% posing dramatic threats to public health

Exposure to air pollution is linked to an increased risk of hospital admission for mental illness, according to the most comprehensive study of its kind[8]. The research, involving more than 200,000 people in Scotland, found an increase in exposure to nitrogen dioxide (NO_2) in particular was associated with a higher number of people being admitted to hospital for behaviour disorders and mental illnesses.

Air pollution carries a huge cost for our health and social care systems; if strong action isn't taken, this is estimated at approximately £5.4bn by 2035, rising to over £18.5bn when costs for diseases and poor health with less robust evidence are included.

Air pollution damages the economy through lost productivity and poor health. Defra commissioned research concluded that air pollution costs the UK economy £2.7 billion each year[9].

The huge adverse health impacts of pollution across H&F make it vitally important that we work closely with our partners in the NHS. The Better Air Better Health collaboration, bringing together the council with Imperial College London and the Imperial College Healthcare NHS Trust, will be a crucial tool for us moving forward. Bringing together academic and clinical expertise will help us to target our projects and policies to have the maximum impact on improving health and wellbeing across H&F and beyond.

---

[6] Air pollution and respiratory health in patients with COPD: should we focus on indoor or outdoor sources? :BMJ Thorax, 7th October 2024, https://thorax.bmj.com/content/early/2024/10/07/thorax-2024-221874

[7] Long-term exposure to PM2.5 has significant adverse effects on childhood and adult asthma: A global meta-analysis and health impact assessment, One Earth (2024), https://doi.org/10.1016/j.oneear.2024.09.0

[8] Long term exposure to ambient air pollution and hospital admission burden in Scotland: 16 year prospective population cohort study, BMJ Open (2024), https://doi.org/10.1136/bmjopen-2024-084032

[9] Valuing the impacts of Air Quality on Productivity | Ricardo AEA | 1511251135_140610_Valuing_the_impacts_of_air_quality_on_productivity_Final_Report_3_0.pdf (defra.gov.uk)

Air Pollution and Climate Change

Air Quality and **Climate Change** are key priorities for the council, as well as being some of the important issues of our time globally. Many of the actions we can take to improve air quality will also have carbon benefits, and vice versa. As a result, it is important for the Council to integrate our air quality and climate policies, to maximise the benefits of our work. This is true not only for air quality and carbon emissions, but also for other environmental challenges we are facing, such as biodiversity, waste management, and noise pollution.

As well as our statutory responsibilities for air quality, Hammersmith & Fulham Council are also tackling the climate and ecological emergency by working towards net zero greenhouse gas emissions by 2030 for the borough. You can find out more about our work in this area in our Climate and Ecology Strategy, published in 2021.

This section provides a summary of the synergies between air quality and other environmental issues[10].

Key interactions between air quality and climate change:

Air pollution and greenhouse gas emissions often come from the same source: emissions from road transport, energy and heat generation and domestic solid fuel burning are some of the most common sources that contribute to both climate change and air pollution. This is the key reason that policies and action on air pollution or climate change will often have a positive impact on each other.

Climate change may make air pollution worse: hotter, drier summers can lead to increased ozone emissions, which have been steadily increasing in London for several years.

Air pollution contributes to climate change: as well as pollutants that impact the climate (such as black carbon, ozone, and methane), air pollution can also affect atmospheric processes such as cloud formation, as well as having negative impacts on water quality, soil fertility, and other measures that indirectly impact climate.

Improvements in local air quality can be felt almost immediately and almost entirely in the area where they are introduced. These impacts are also measurable: the benefits can be felt almost straightaway as having a positive impact on people's lives. In contrast, the benefits of local measures to reduce greenhouse gas emissions are not necessarily tangible immediately and locally. This means that measures that address both air quality and climate change have immediate local and long-term global benefits.

A UK study[11] of how Climate change policies reduce air pollution and increase physical activity focused on two of the largest UK sources, road transport and building heating, with comparisons made between Net Zero and UK existing policy.

[10] Integrating Action on Air Quality & Climate Change: A Guide for Local Authorities, Version 1, September 2024| Environmental Policy Implementation Committee

[11] Climate change policies reduce air pollution and increase physical activity: Benefits, costs, inequalities, and indoor exposures, December 2024, Environment International https://doi.org/10.1016/j.envint.2024.109164

It found compared to Business as Usual (BAU) predictions, Balanced Net Zero Pathway (BNZP) assumptions lead to more electric vehicles, reduced vehicle km, more low carbon building heating, and reduced emissions of NO_2 and $PM_{2.5}$. By 2040 under BNZP, relative to BAU, the buildings sector was predicted to be three times more effective at reducing $PM_{2.5}$ than road transport.

Outdoor air pollution exposure inequalities prevailed across the socioeconomic spectrum, especially for Nitrogen Dioxide (NO_2) but were less pronounced due in part to Net Zero (NZ) policies. Analysis also found that removing gas cooking at home, for NZ, may result in greater concentration reductions than outdoor air pollution for NO_2.

Net Zero health and economic co-benefits are large, as are the changes needed, requiring political leadership and public engagement.

Air Pollution and other environmental priorities

Biodiversity

Air pollution adversely affects our biodiversity and nature within the borough. Pollution can cause acidification and nutrient damage to our natural environment, and ozone pollution will directly harm plants and other vegetation. Taking strong action on biodiversity and ecology will have benefits for air pollution: many types of plants and vegetation have direct air quality benefits, and open spaces and vegetation can act as barriers between sources of pollution and the general public. There are also indirect benefits: having high quality green open spaces that people spend time in and travel through will reduce their exposure to harmful roadside pollution.

Noise

High levels of noise are associated with poor health, including stress and sleep disturbance. Some measures taken to improve air quality and climate change also reduce noise, such as reducing the number of vehicles on the road and using cleaner, quieter technologies such as electric or hybrid vehicles. Areas of noise pollution often overlap with areas with poor air quality, so effective action may improve both.

2. Summary of current air quality in Hammersmith & Fulham

National air quality objectives

The UK Air Quality Strategy (AQS), released in 2019, provides the overarching strategic framework for air quality management in the UK and contains national air quality standards and objectives established by the Government to protect human health.

Hammersmith & Fulham Council is meeting all the national AQS objectives other than for the gas Nitrogen Dioxide (NO_2) and Particulate Matter (PM_{10}). Hammersmith & Fulham Council also meets the current objectives for Particulate Matter ($PM_{2.5}$). However, in 2022 the government set additional environmental targets for fine particulate matter which state that by the end of the 31st of December 2040, the annual mean level of $PM_{2.5}$ in ambient air must be equal to or less than 10 µg/m³. In 2024 Hammersmith & Fulham met this target at its air quality monitoring stations at Hammersmith Town Centre and Shepherds Bush Town Centre.

World Health Organisation Air Quality Guideline Values

These are another set of stricter limit values for air pollutants, developed to help countries achieve air quality that will offer greater protection of public health. These are updated regularly to reflect evidence from new health studies.

Hammersmith & Fulham Council are proud to have committed to meeting the World Health Organisation (WHO) health-based guidelines as quickly as possible, aiming to meet the full guideline levels by 2030.

The most recent WHO air quality guidelines were published in 2021 and are compared below to national objectives. The guidelines are compared to concentrations measured at two of the six council automatic monitoring stations. A further four monitoring stations were installed in 2023 for which first data will be published in our next annual status report.

Table 1.1 Current borough pollution levels compared to national air quality objectives and WHO Guideline Values

Pollutant	Air Quality Objective (Annual Mean) ug/m^{-3}	WHO 2021 Air Quality Guideline ug/m^{-3}	Shepherds Bush Town Centre (HF4)			Hammersmith Town Centre (HF5)		
			2019	2023	2024	2019	2023	2024
NO_2	40	10	60	36	34	52	40	37
PM_{10}	40	15	25	22	20	22	17	15
$PM_{2.5}$	10 *	5	-	10	9	15	9	9

* annual mean **concentration target** (AMCT) from Environment Act 2021- by the end of 31st December 2040 the annual mean level of PM2.5 in ambient air must be equal to or less than 10 µg/m³
Note- Covid years 2020 and 2021 not shown as these concentrations would be less representative.

Hammersmith and Fulham Air Quality Targets

The council is committed to improving air quality and protecting human health and has set an ambitious target of **2030** to meet the annual mean **World Health Organisation Air Quality Guideline Values (2021)** for the **air pollutants NO_2, $PM_{2.5}$,** and **PM_{10}**.

National legal limits on emissions

In addition to the concentration limits we will work towards meeting in the borough, there are national limits for five man-made pollutants, stated in the Environmental Improvement plan 2023. The target for nitrogen oxides is a 73% reduction in emissions by 2030 relative to levels in 2005. This action taken at a national level will also help to reduce people's exposure to air pollution.

Figure 4 Modelled map of annual mean NO_2 concentrations (from the LAEI 2019)

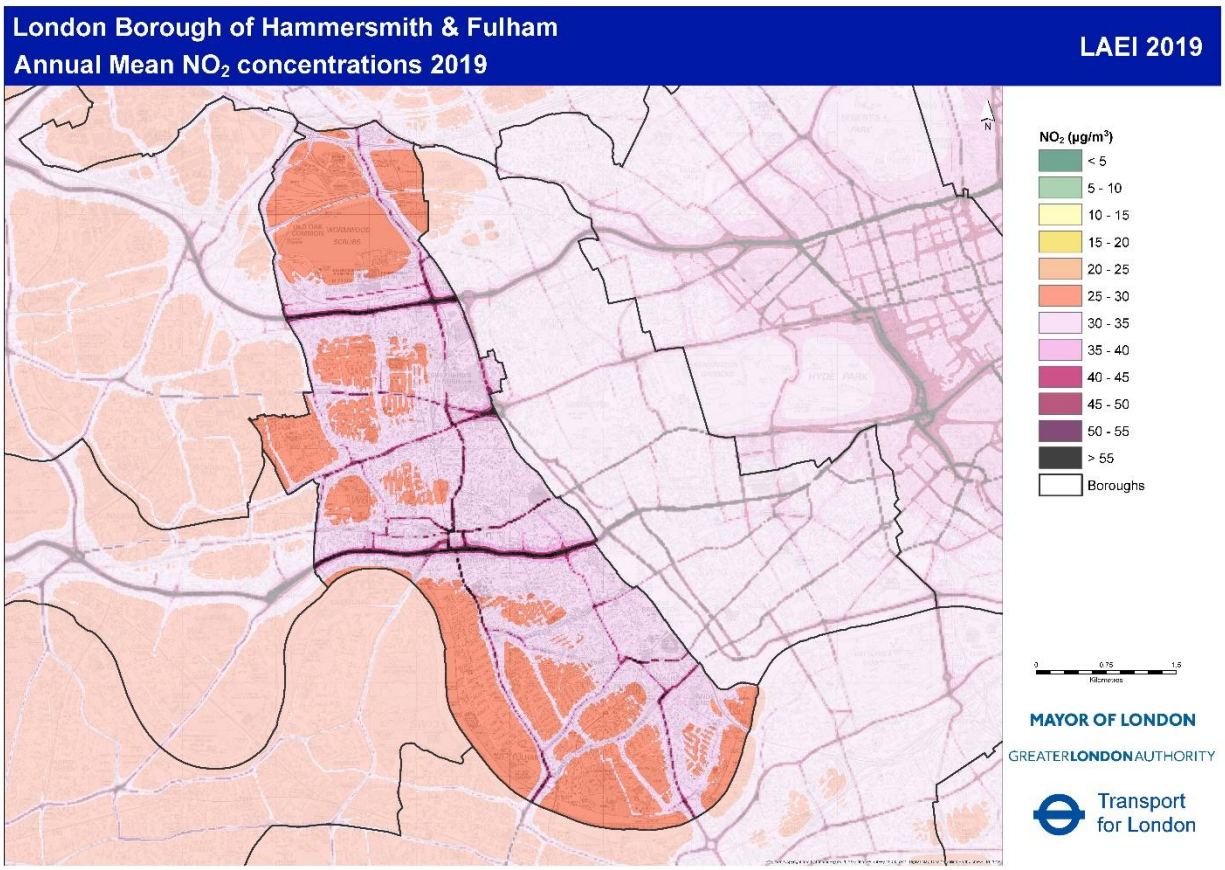


Figure 4 shows the modelled map of annual mean NO_2 concentrations across the borough. This visualisation clearly indicates the significant role road traffic plays in NO_2 concentrations, as the highest concentrations, over 50 µg/m^3, are all centred around roads. Amongst these roads, the highest concentrations appear along the A40 Westway in the north of the borough, and the A4 Great West Road in the middle of the borough, as these are the main arterial routes that connect to borough to Hounslow, Ealing and Kensington & Chelsea.

Our action plan looks to reduce these concentrations and their harmful effects by encouraging cleaner modes of transport around the borough including public transportation, cycling and walking, as well as actions targeted at raising public awareness, improving the borough's own fleet and other localised solutions such as Clean Air Neighbourhoods.

Figure 5 Modelled map of annual mean PM_{10} (from the LAEI 2019)

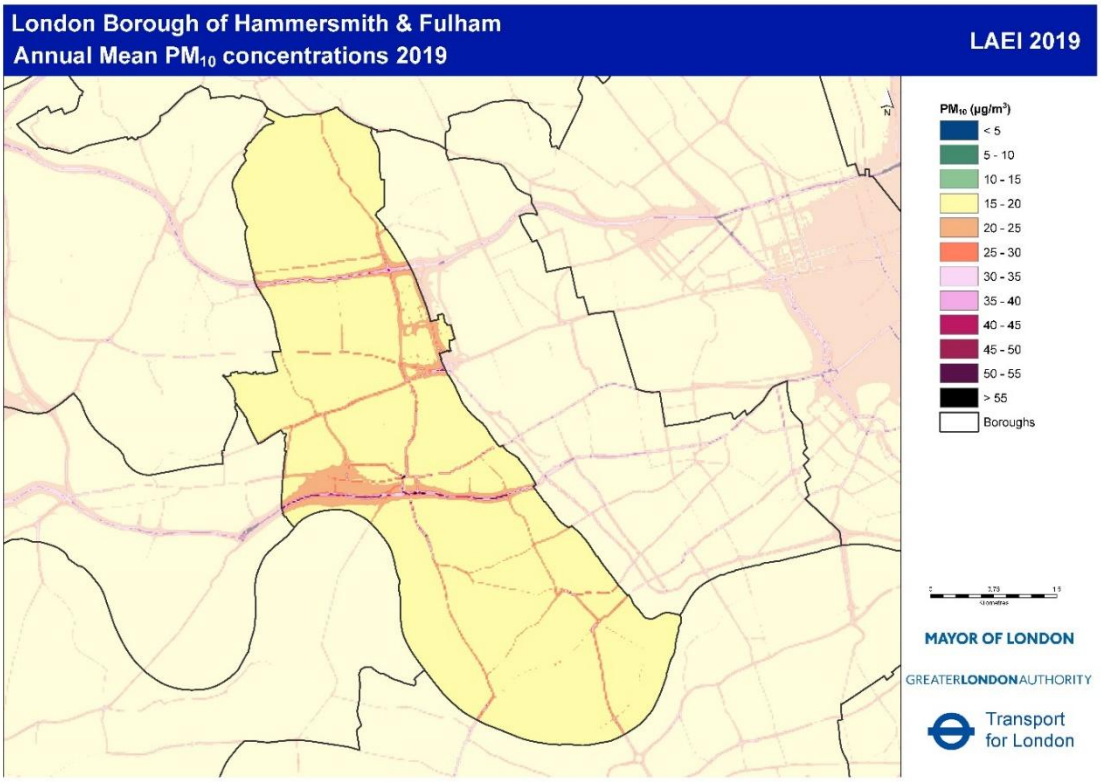


Figure 5 shows the modelled annual mean concentrations of PM_{10} in the borough. As with NO_2, these concentrations are largely centred around the main traffic routes within the borough, with notably large concentrations along the A40 Westway, the Shepherds Bush Green intersection, and the A4 Great West Road.

Figure 6 Modelled map of annual mean $PM_{2.5}$ (from the LAEI 2019)

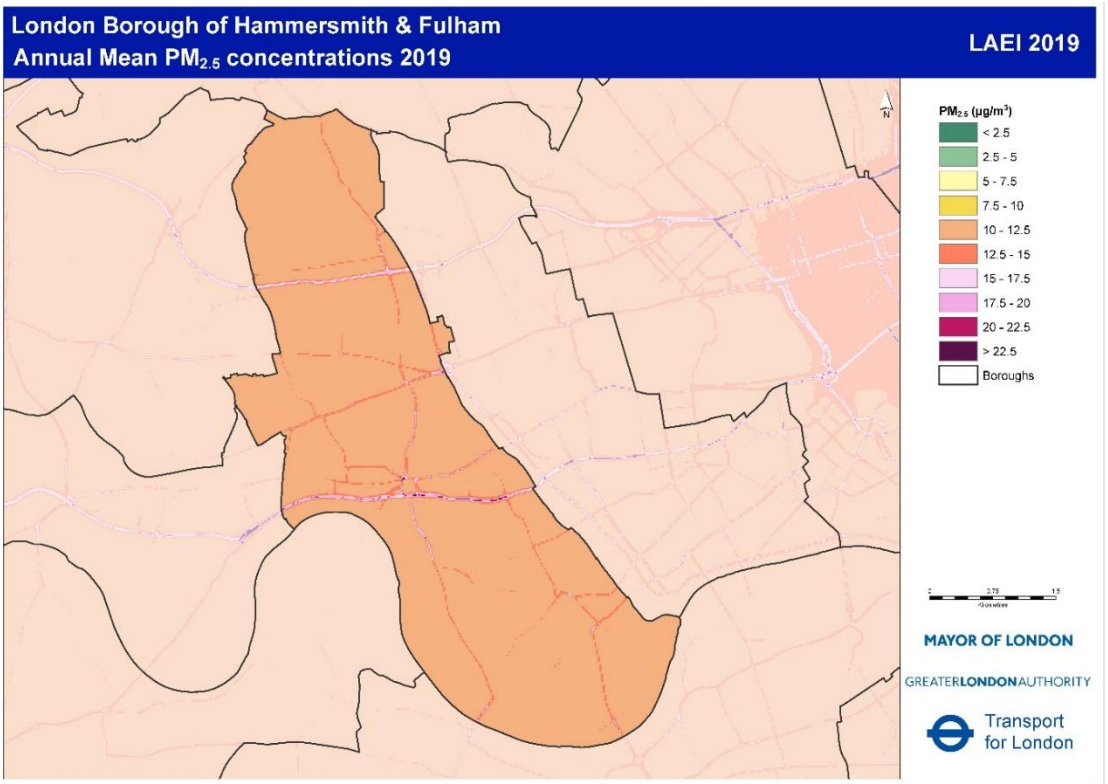


Figure 6 shows the modelled map of $PM_{2.5}$ concentrations across the borough. As with PM_{10}, the highest concentrations of $PM_{2.5}$ are all centred around the main roads within the borough, with the highest concentrations appearing along the A40 Westway and the A4 Great West Road.

2.1 AQMAs and Focus areas

A whole-borough Air Quality Management Area (AQMA) has been declared for Hammersmith & Fulham.

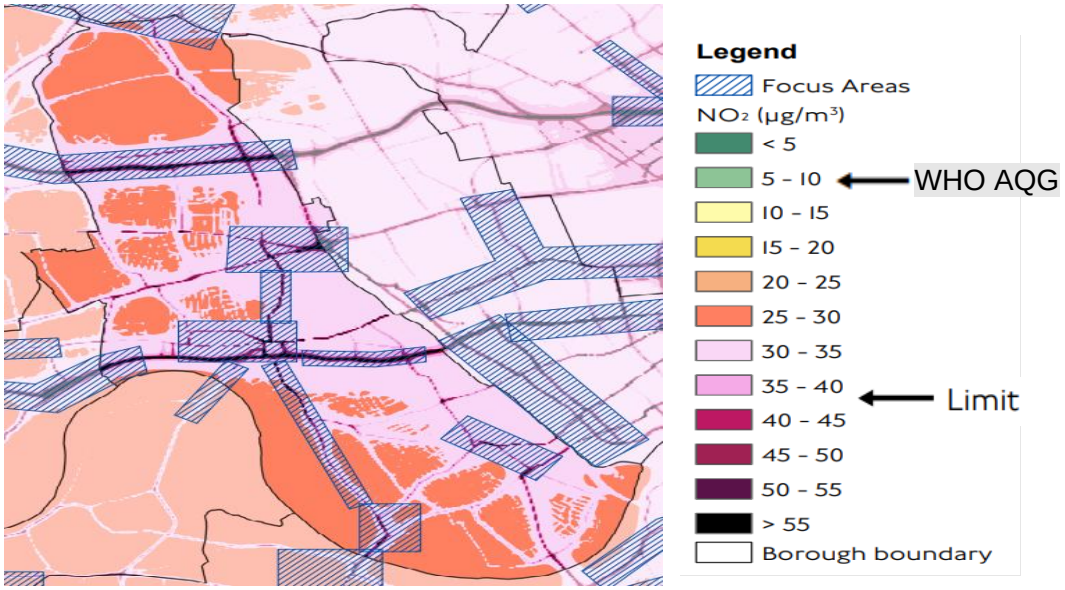
The AQMA has been declared for the following pollutants: Nitrogen Dioxide (NO_2) and Particulate Matter (PM_{10}). In respect to Nitrogen Dioxide, this is because we are failing to meet the national air quality objectives for this pollutant at some of our monitoring stations and modelling indicates it is being breached at a number of other locations. In respect to Particulate Matter (PM_{10}) we are meeting the national air quality objective for annual mean but have exceeded the 24 hour mean in 2021 and 2022.

We are also exceeding the World Health Organisation air quality guideline for this pollutant, and we have a formal responsibility to work towards reductions of $PM_{2.5}$, which is a fraction of PM_{10}. Concentrations of $PM_{2.5}$ are at or above the new annual mean concentration target for $PM_{2.5}$ of 10 $\mu g/m^{-3}$ across England by 2040. $PM_{2.5}$ concentrations also exceed the World Health Organisation air quality guideline for this pollutant.

An Air Quality Focus Area (AQFA) is a location that has been identified and set by the GLA as having high levels of pollution and human exposure.

There are seven focus areas in the borough: A4 West Cromwell Road, A213 Fulham Palace Road from Hammersmith Flyover to junction of Lillie Road, Fulham Town Centre and Harwood Road area, Hammersmith Town Centre, Holland Park Uxbridge Road/Shepherd's Bush Road/Bush Green/Holland Road, Putney Bridge, A219, Shepherds Bush Road (A219), and the junction with Fulham Road/New Kings Road/Fulham Palace Road.

Figure 7 Air Quality Focus Areas in Hammersmith & Fulham



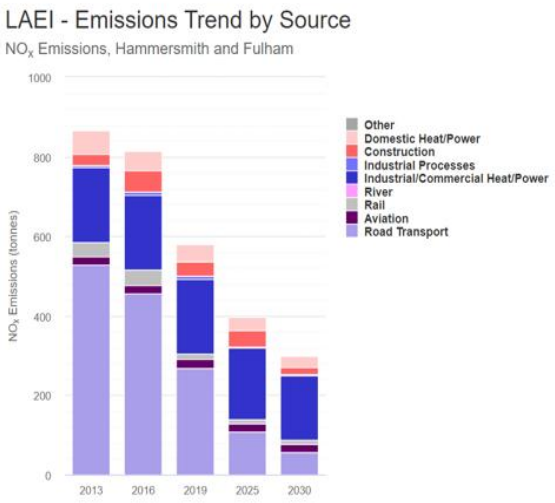
2.2 Sources of Pollution in Hammersmith & Fulham

Pollution in Hammersmith & Fulham comes from a variety of sources. This includes sources outside of the borough, and in the case of Particulate Matter (PM_{10}, $PM_{2.5}$), a significant proportion of this comes from outside of London and even outside the UK.

Of the pollution that originates in the borough the main sources of Nitrogen Oxides (NO_x), including Nitrogen Dioxide (NO_2), are road transport including diesel vehicles and combustion-based energy plants such as Combined Heat and Power (CHP), gas boilers, and emergency diesel generators. The main sources of particulate matter are Domestic Woodburning and on and off-road transport such as diesel vehicles and Non-Road Mobile Machinery (NRMM).

Data is available from the London Atmospheric Emissions Inventory which provides data gathered in 2013, 2016, and 2019 and modelled for 2025 and 2030 based on current predictions and technology.

Figure 8 NO_x Emissions by source (from the LAEI 2019)



Emissions (Tonnes) from	2013	2016	2019	2025	2030
Road Transport	529	457	269	109	58
Aviation	20	20	22	21	20
Rail	36	38	13	9	9
River	0	0	0	0	0
Industrial/Commercial Heat/Power	189	189	188	181	163
Industrial Processes	5	6	6	3	3
Construction	28	54	37	42	19
Domestic Heat/Power	60	49	44	32	28
Other	1	1	1	1	1
Total	**867**	**814**	**580**	**397**	**299**

Note

This summary dashboard is based on the London Atmospheric Emissions Inventory 2019. The charts show emissions from each air pollution source stacked on top of one another, with the total stack height equalling total emissions from all sources across the borough. The numbers in the table are those used to plot the graph and represent, for each year, the amount of pollutant emitted into the atmosphere (in tonnes/year).

- Industrial Processes: includes emissions from Part A1, A2/B processes, and Non-Road Mobile Machinery (NRMM) exhaust on industrial sites.
- Construction: includes emissions from construction dust (PM) and NRMM exhaust on construction sites.

Figure 8 shows that for sources of NO_x within Hammersmith & Fulham (as represented by the most recent data from 2019) the largest contributor is currently Road Transport, followed by Industrial, Commercial Heat and Power as the second largest source. However, while Road Transport emissions of NO_x are projected to decline by approximately 78% between 2019-2030, Industrial emissions of NO_x are projected to remain relatively stagnant over the same period with a decline of approximately 13%.

By 2025, Industrial/Commercial Heat and Power sources are projected to be the largest sources of NO_x emissions in Hammersmith & Fulham by a significant proportion.

Figure 9 NO_x Emissions by vehicle type (from the LAEI 2019)

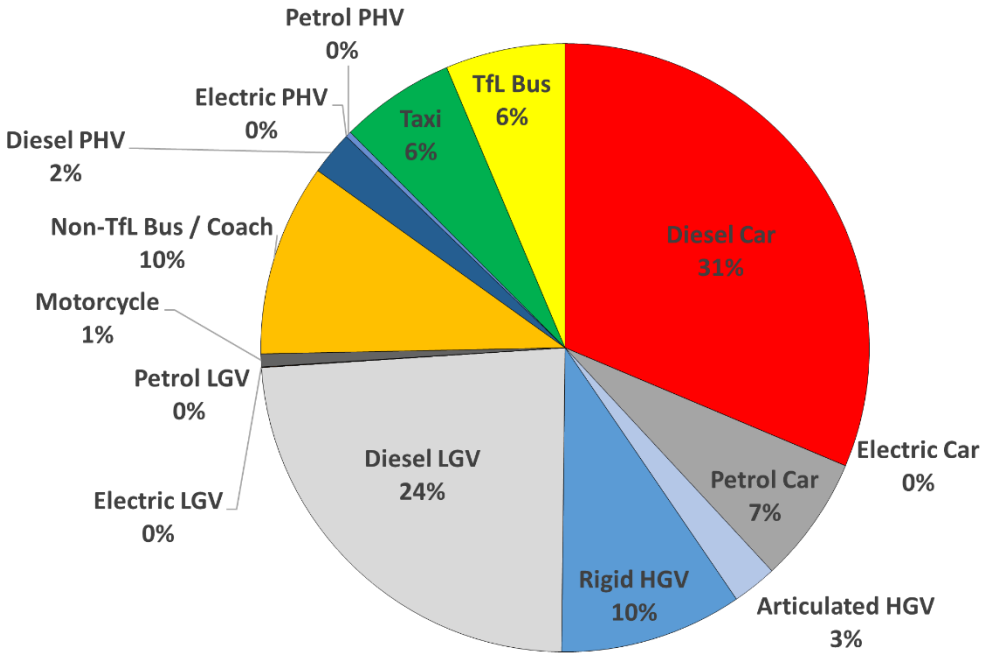
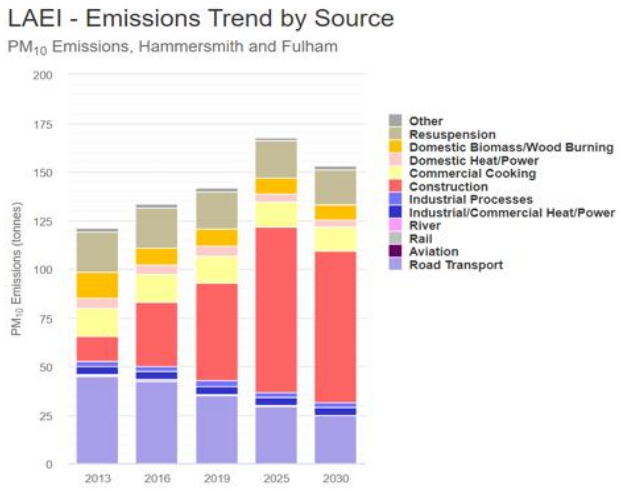


Figure 9 illustrates that 31% of NO_x vehicle emissions comes from diesel cars. This contrasts with 7% from petrol cars, despite the fact there are fewer diesel cars than petrol cars in London. Together, diesel cars and diesel LGVs account for over half of all vehicle NO_x emissions within the borough.

Figure 10 PM_{10} Emissions by source (from the LAEI 2019)



Emissions (Tonnes) from	2013	2016	2019	2025	2030
Road Transport	45	42	35	29	25
Aviation	0	0	0	0	0
Rail	1	1	0	0	0
River	0	0	0	0	0
Industrial/Commercial Heat/Power	4	4	4	4	4
Industrial Processes	3	3	3	2	2
Construction	13	33	50	85	78
Commercial Cooking	14	14	14	13	12
Domestic Heat/Power	5	5	5	4	4
Domestic Biomass/Wood Burning	14	9	9	8	8
Resuspension	20	21	19	19	18
Other	2	2	2	2	2
Total	**121**	**133**	**142**	**167**	**153**

Note

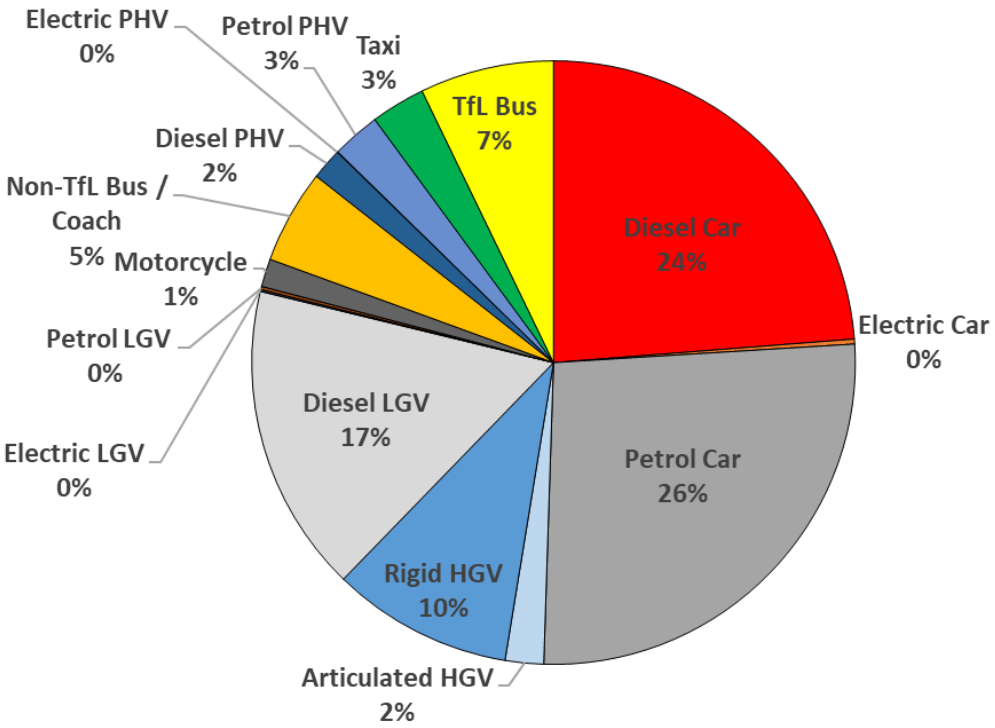
This summary dashboard is based on the London Atmospheric Emissions Inventory 2019. The charts show emissions from each air pollution source stacked on top of one another, with the total stack height equalling total emissions from all sources across the borough. The numbers in the table are those used to plot the graph and represent, for each year, the amount of pollutant emitted into the atmosphere (in tonnes/year).

- Industrial Processes: includes emissions from Part A1, A2/B processes, and Non-Road Mobile Machinery (NRMM) exhaust on industrial sites.
- Construction: includes emissions from construction dust (PM) and NRMM exhaust on construction sites.

The sources of PM_{10} within Hammersmith & Fulham are shown in Figure 10 where the most recent data (LAEI 2019) indicates that the largest contributor is Construction followed by Road Transport. Where Road Transport is projected to decline by around 29% between 2019-2030, The proportion of emissions from construction sources are projected to increase by approximately 56% over the same period and will remain the largest source of PM_{10} emissions in the borough.

Hammersmith & Fulham currently has numerous large-scale developments underway within the borough, including the Earl's Court re-development scheme. These projects will inevitably contribute to PM levels within the borough. To tackle the impact of these projects, the council has included several actions points to tackle dust from construction sites and to reduce the emissions from Non-Road Mobile Machinery.

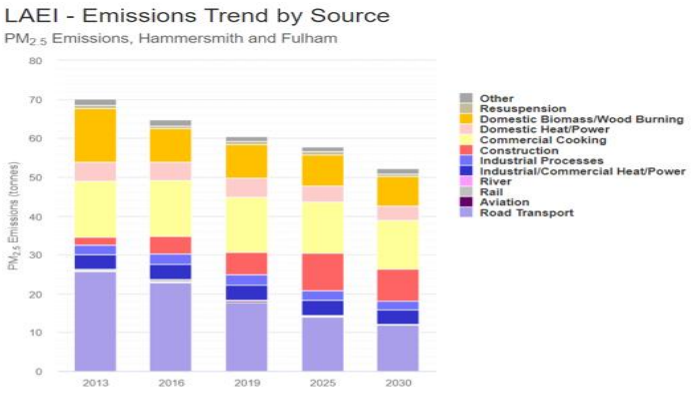
Figure 11 PM_{10} Emissions by vehicle type (from the LAEI 2019)



Splitting the road transport PM_{10} emissions, the greatest contributor to road transport PM_{10} are petrol cars (26 %) followed by diesel cars (24%) as shown in Figure 11. PM_{10} emissions are greater because there are more petrol cars then diesel cars. According to 2021 data from TfL, on any given day approximately 66% of cars traveling around the ULEZ were petrol, whereas only 23% were diesel. Despite there being nearly three times as many petrol cars than diesel in London, figure 11 shows diesel vehicles account for roughly the same amount of Hammersmith & Fulham's PM_{10} emissions.

Road transport PM_{10} emissions are generated from exhaust gases and from tyre and brake wear. In the London Borough of Hammersmith and Fulham 24% of road transport PM_{10} emissions originate from the exhaust whereas 76% are generated from tyre and brake wear.

Figure 12 $PM_{2.5}$ emissions by source and vehicle type (from the LAEI 2019)

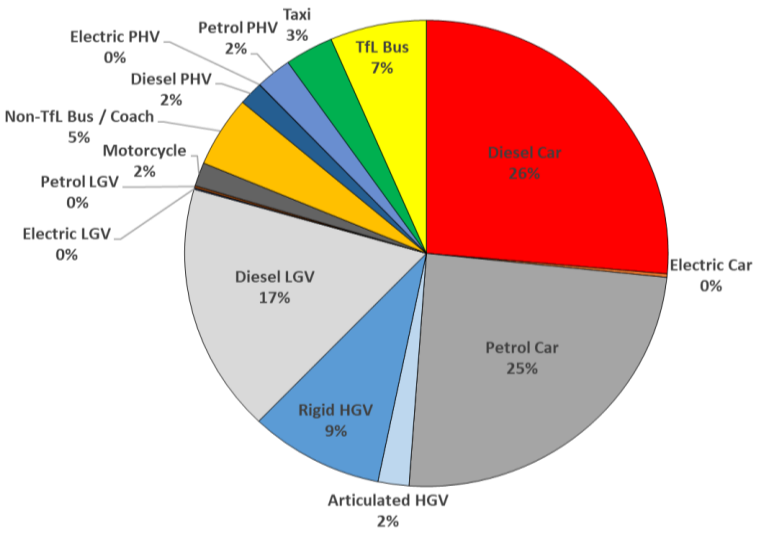


Emissions (Tonnes) from	2013	2016	2019	2025	2030
Road Transport	26	23	18	14	12
Aviation	0	0	0	0	0
Rail	0	0	0	0	0
River	0	0	0	0	0
Industrial/Commercial Heat/Power	4	4	4	4	4
Industrial Processes	3	3	3	2	2
Construction	2	5	6	10	8
Commercial Cooking	14	14	14	13	12
Domestic Heat/Power	5	5	5	4	4
Domestic Biomass/Wood Burning	14	9	9	8	8
Resuspension	1	1	1	1	1
Other	2	2	1	1	1
Total	**70**	**65**	**60**	**58**	**52**

Note
This summary dashboard is based on the London Atmospheric Emissions Inventory 2019. The charts show emissions from each air pollution source stacked on top of one another, with the total stack height equalling total emissions from all sources across the borough. The numbers in the table are those used to plot the graph and represent, for each year, the amount of pollutant emitted into the atmosphere (in tonnes/year).
- Industrial Processes: includes emissions from Part A1, A2/B processes, and Non-Road Mobile Machinery (NRMM) exhaust on industrial sites.
- Construction: includes emissions from construction dust (PM) and NRMM exhaust on construction sites.

The sources of $PM_{2.5}$ within Hammersmith & Fulham are varied as shown in the most recent data (LAEI 2019) displayed in Figure 12. The largest current contributor is Road Transport, followed by Commercial Cooking as the second largest source and Domestic burning of solid fuel such as wood. However, between 2019-2030 Road Transport emissions of $PM_{2.5}$ are projected to decline by approximately 33%, whereas Commercial Cooking is expected to decrease by only 14%. By 2030 Road Transport and Commercial Cooking are expected to account for roughly the same quantity of $PM_{2.5}$ emissions in the borough.

Figure 13 Road Transport $PM_{2.5}$ Emissions per vehicle type (from the LAEI 2019)



Splitting the road transport $PM_{2.5}$ emissions in Figure 13, the greatest contributor to road transport $PM_{2.5}$ are diesel cars (26 %) followed by petrol cars (25%), despite there being fewer diesel cars then petrol cars in London.

Road transport $PM_{2.5}$ emissions are generated from exhaust gases and from tyre and brake wear. In Hammersmith & Fulham 40% of road transport $PM_{2.5}$ emissions originate from the exhaust whereas 60% are generated from tyre and brake wear.

3. Our achievements and progress so far

This Action Plan builds on a range of work the Council has already taken to improve air quality across the borough. This section provides a summary of some of the work we have taken over the lifetime of our previous Air Quality Action Plan.

Highlights of successful projects we have already delivered include:

- The council declared a Climate emergency in 2019 and pledged to reduce council emissions of carbon dioxide to net zero by 2030. Our Climate and Ecology Strategy 2030 was produced in 2021, H&F Climate and Ecology Strategy.

- The council has committed to improving air quality and protecting human health and has set an ambitious target to meet World Health Organisation Air Quality Guidelines (2021) for NO_2, PM_{10} and $PM_{2.5}$ by 2030.

- We have introduced two Clean Air Neighbourhood projects in South Fulham. The first, to the east of Wandsworth Bridge Road, was launched in July 2020 and made permanent in December 2021. The second, to the streets to the west of Wandsworth Bridge Road, was launched in December 2022 and was made permanent in March 2024. Together these projects have seen 15,000 fewer cars a day using residential streets with an estimated reduction of 1.35kg daily of nitrogen oxide (NO_2).

- The council in September 2024 introduced School Street Plus Active Travel Trial Schemes outside the main student entrances of Wendell Park Primary School (Cobbold Road), Sir John Lillie Primary School (Delaford Street), and in November 2024 at Holy Cross R.C. Primary School (Basuto Road). Parts of these three streets during peak drop-off and pick-up times will be closed to motorists from 8 am to 9.30 am and 2.30 pm to 4 pm on school days only.

  Alongside the temporary road closures, a range of public realm improvements including tree planting and better infrastructure for walking and cycling will make the wider area greener and cleaner.

- The Council has been successful in implementing one of the densest network of EVCPs in London. At the time of writing, there were over 2,600 EVCPs installed, with more phases to come, despite the Borough being the second smallest in London. The network includes a range of charging speeds from slow lamp column chargers to rapids. The Borough also has two charging hubs.

- We launched the zero-emission delivery scheme ‘Parcels not pollution’ cargo bike service in the borough in 2021 with funding from a TfL grant. In 2022 we expanded this scheme together with MP Smarter Travel to encourage local businesses to adopt e-cargo bikes. So far, 131 local businesses have engaged with the scheme, with nine complete conversions from cars/vans to e-cargo bikes.

- In 2022 the council completed the Cycleway 9 (C9), an upgrade on the temporary cycle lanes introduced under Covid guidelines. The scheme was made permanent from Goldhawk Road in the west, to Hammersmith Road in the east and continues to Olympia with wands. The total length of the cycleway is 2,721 metres.

- In 2023 the council installed four new air quality monitoring stations at Fulham Town Centre, and in the Riverwalk, Sands End and Wormwood Scrubs wards. The council now has a total of six air quality monitoring stations including at Hammersmith Town Centre that contain reference grade analysers that measure the air pollutants nitrogen dioxide (NO_2), particulate matter ($PM_{2.5}$ and PM_{10}) and Ozone. Equipment at the Shepherds Bush monitoring station was upgraded in 2021 and now includes monitoring of PM2.5.

- The council has funded the installation of 60 Air Quality sensors across the borough between 2022 and 2025 as part of the Breathe London Air Quality Sensor Network. We have placed 48 of these Air Quality Sensors near the student entrances of Primary, Nursery and Secondary Schools across Hammersmith & Fulham. These locations were selected to monitor the concentrations of the health impacting air pollutants Nitrogen dioxide (NO_2) and Particulates ($PM_{2.5}$) near to Schools.

- The council introduced emissions-based parking charges for sessional parking in on-street Pay & Display bays in March 2021 and residents parking permits in February 2025., The council's Net Zero 2030 Parking Strategy has introduced several emissions-based parking categories for residential parking permits, visitors and Pay & Display.

- Hammersmith & Fulham is one of only 10 London boroughs to have launched a rental e-scooter scheme since 2021, which is currently the only legal way to use an electric scooter.

- The Climate Change supplementary planning document (SPD) was formally adopted by the council in October 2023. This includes chapters on Transport and Air Quality issues and highlights measures that can be implemented to mitigate air pollutants and climate change gases such Carbon Dioxide (CO_2). Other place-based policies such as the Hammersmith Town Centre SPD that was adopted by the council in October 2024 also includes commitments on air quality.

- The council secured Defra funding and to develop and pilot a website to control emissions from construction sites more effectively in 2023.

- We worked closely with the Hammersmith Business Improvement District (BID), Fulham Business Improvement District (BID) and Shepherds Bush Business Forum on Clean Air Villages (1-4) as a member of the Cross River Partnership (CRP) led project (supported by MAQF and Defra funding). This included free-to-use electric vans located in Fulham and Shepherds Bush for small businesses in H&F from 2021 as a member of the Cross River partnership led Clean Air Villages Project (supported by MAQF and Defra funding). The council together with Old Oak and Park Royale Development Corporation (OPDC), partnered with the Park Royal Business Group and Zipcar to offer businesses in Park Royal the opportunity to hire two electric vans for free from 2022.

- In May 2023 as part of the CRP led and Defra funded Clean Air Logistics project, the Chelsea Harbour Sustainable Deliveries Hub began operating in the Chelsea Harbour Estate in Sands End. The hub is made up of two cargo bike delivery bays as well as a 'Yeep!' parcel locker. CRP worked with Hammersmith & Fulham Council and the Chelsea Harbour Estate to deliver the hub, which aims to encourage zero emission deliveries to residents as well as the surrounding area.

The Chelsea Harbour Sustainable Deliveries Hub is also supporting potential river freight opportunities as the hub is located near to Chelsea Harbour Pier, which has been identified as a good opportunity for light freight river services. As a result, the hub is well located to support any potential river freight operations that could use Chelsea Harbour Pier in the future.

- The council's Dr Bikes mechanics worked on 1,185 resident's bikes over 2022/23. The scheme was expanded to sites including the West London Welcome refugee centre, Imperial College White City and Charing Cross, Hammersmith and St. Mary's Hospitals. As part of the council's Widening Participation scheme just over 1,100 secondary school pupils in the borough received Bikeability training. In addition to this, 648 primary school pupils received Levels 1 & 2 Bikeability training, and 455 adults and families also received cycling training. The council has received funding to restart the programme in 2023.

- We ensured that the council's waste contractor fleet HGVs met the Low Emission Zone requirements and that they are actively procuring vehicles that meet higher emissions standards, such as the Ultra Low Emission Zone, including electric and hybrid vehicles.

- The council was a member of the Idling Action London project, which was funded by the third round of the Mayor's Air Quality Fund (MAQF) and ran 2019-2022.

4. The Air Quality Action Plan Matrix

This section of the Air Quality Action Plan sets out the actions, policies and projects we will undertake in the lifetime of this plan to improve air quality in Hammersmith & Fulham.

Development and Implementation of the H&F AQAP

4.1 Consultation and Stakeholder Engagement

In developing/updating the action plan we have worked with other local authorities, agencies, businesses and the local community to improve local air quality. Schedule 11 of the Environment Act 1995 requires local authorities to consult the bodies listed in Table 3.1. In addition, we have undertaken the following stakeholder engagement:

- Promotion of consultation on our website
- On-line survey to collect comments on draft AQAP
- Regular Tweets from the Council Twitter account
- Engaging with residents via the council's 'climate café' programme of online events and webinars

As air quality is an issue that affects us all, co-creation of this Plan is critical. The public consultation for this AQAP took place in December 2023 – February 2024. Numerous changes to the draft AQAP were made following the consultation. The response to our consultation stakeholder engagement, including a tracker outlining the changes made to the Plan following the consultation, is given in *AQAP Annex: Consultation Responses* document. This included changing the dates for the AQAP from 2024-29 to 2025-30.

4.2 Steering Group

A steering group comprised of officers from around the council including transport, highways, planning, housing, public health, fleet management, procurement and communications will meet a minimum of twice a year to go over the actions in this plan to track its progress, to identify existing projects that could be augmented to address air quality concerns, and to plan out future actions and projects as well as funding opportunities to make air quality improvements.

4.3 AQAP Progress

Table 4.1 shows Hammersmith & Fulham's AQAP. The actions listed here will be constantly reviewed and updated at least annually as part of the council's Annual Status Reports published on our website.

Table 4.1 contains:

- a list of the actions that form part of the plan
- the responsible individual and departments/organisations who will deliver this action
- estimated cost to the council
- expected benefit in terms of emissions and concentration reduction
- the timescale for implementation
- how progress will be monitored

Below is a Key to reading the Action Plan.

Key for reading the Action Plan:

Who: name of the council department responsible for this action	**BF:** Borough Fleet **CP:** Property Services **EH**: Environmental Health **HS:** Housing Services **HW**: Highway Maintenance and Projects **PH**: Public Health **PL**: Planning **PR:** Procurement **TR**: Transport Planning **AQ**: Air Quality **PS**: Parking Services **CU**: Climate and Ecological Emergency Unit
Cost	If the cost to implement an action is already part of the council's budget, then **'Normal Business'** is entered here. Otherwise the funding sources and costs are listed.
Score: Expected Emissions Benefit	Magnitude of the expected Air Quality Benefits High=**1** Medium=**2** Low =**3**
NO_2, PM, CC	Tick marks indicate whether the action will have an impact on **NO_2** (nitrogen dioxide), **PM_{10}** and **$PM_{2.5}$** (particulate matter) or **CC** (Climate Change gasses).

When	What **year** (or month) this action will be implemented of completed or if this is **ongoing** and will be reported annually
How implementation will be monitored	All actions will be monitored by the responsible department, discussed and tracked during AQAP steering group meetings and reported yearly in the Annual Status Report; further specifics are mentioned here.

Table 4.1 – Air Quality Action Plan

The actions have been grouped into six categories: Emissions from developments and buildings; Public health and awareness raising; Delivery servicing and freight; Borough fleet actions; Localised solutions; and Cleaner transport.

A	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Emissions from developments and buildings										
1	Ensuring emissions from construction are minimised by ensuring that all major developments provide an air quality assessment (AQA) which includes a Dust Risk Assessment and	EH/PL/ AQ	Normal business and external funding from Defra.	1	✓	✓		This is on-going and reported annually.	100% of construction dust complaints investigated and resolved by Environmental Health Noise and Nuisance Team. Number of planning	In line with the Practice Note: Control of Dust and Emissions from Construction and Demolition, GLA, 2024, Control of Dust and Emissions during Construction and Demolition, SPG, July 2014 , and Guidance on Monitoring in the Vicinity of Demolition and Construction Sites, Version 1.1, IAQM, October 2018

A	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Emissions from developments and buildings										
	Transport Logistics Assessment AQAs must also have reference to not just national objectives but also to the council's 2030 AQ Targets and WHO guideline values for the air pollutants NO_2, $PM_{2.5}$ and PM_{10}, which the council has committed to meeting by 2030								applications where planning condition for automatic air quality monitoring recommended reported in the Annual Status Report. Monitoring of major planning applications to ensure all include an adequate AQA.	
2	Ensuring enforcement of Non-Road Mobile Machinery (NRMM) air quality policies by ensuring that NRMM conditions are included on all relevant planning	AQ/PL	£4,000 per year with additional funding	1	✓	✓	✓	This is on-going and reported annually.	100% of relevant applications to include NRMM conditions. To be reported annually alongside information on	London City Hall have a website available with further information on NRMM: Non-Road Mobile Machinery (NRMM) | London City Hall

A	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Emissions from developments and buildings										
	applications. The council will conduct monitoring and enforcement of this via spot checks on construction sites. There is a requirement that Stage V NRMM NOx and PM standards will be used for all equipment on all developments boroughwide, and developers will have to justify any exemptions to this.		from the GLA.						numbers of site inspections and sites on the NRMM register. Number of planning applications when a NRMM planning condition is recommended will be reported in the Annual Status Report.	Hammersmith & Fulham Council is part of a fourth round of the match funded MAQF Pan-London NRMM auditing scheme
3	Planning: reducing emissions from buildings	AQ/PL	Normal business	1	✓	✓	✓	This is on-going and reported annually	100% of relevant applications to include appropriate conditions, are currently and will	The commitment to zero emissions to air aligns with the Council's net zero by 2030 and adoption of the annual mean WHO air quality guideline values (2021). The relevant paragraphs of the National Planning Policy Framework

A	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Emissions from developments and buildings										
	There is a requirement that new developments will aim to achieve zero emissions to air. The use of carbon-based combustion plant e.g. gas boilers, CHP, and emergency diesel generators shall no longer be considered a default option for developments. Where appropriate, we will add planning conditions related to zero emission to air technologies to developments. Enforcing CHP and biomass air quality policies. Reducing								continue to be reported on annually. The council aims to be carbon neutral by 2030. This project is working in conjunction with this target. Number of sites for which NOx and PM emission Standards planning condition for CHP (NOx-25 mg/Nm^{-3} (at 5% O_2), Gas boilers, (NOx-30 mg/kWh) and emergency diesel generators recommended NOx (95 mg/Nm^{-3} (at 15% O_2) and	(2024) with respect to air quality can be found in the Air Quality and Planning section at the end of this Plan. Air quality assessments submitted to planning department must reference the councils 2030 Annual Mean Air Quality Targets and WHO based Air Quality guideline values for the air pollutants NO_2, $PM_{2.5}$ and PM_{10} Mitigation shall be required at homes, schools, workplaces or other development if there are exceedances of the councils 2030 Air Quality Targets for $N0_2$, $PM_{2.5}$ and PM_{10} and where current and future predicted pollutant concentrations are within 5% of these limits. To reduce carbon-based gas connections within homes and commercial organisations and to ensure

A	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Emissions from developments and buildings										
	emissions from combustion-based plants and switching over to the use of heat pumps and the development of clean heat networks. Zero emissions alternatives to carbon-based back-up generators must be considered. For carbon-based back-up generators, we would expect a valid justification on why a secondary main electricity supply or Uninterruptible Power Supply (UPS) is not feasible.								Particulate (PM) (0.015 g/kWh. Number of sites for which planning conditions for ASHP, GSHP, Electric Boilers, Electric Induction Cooking Hobs and Secondary mains power supply/ Uninterruptable Power Supply (UPS) are recommended	adequate levels of indoor air quality the council shall as part of the planning and development control process shall encourage the use for all major and minor development (including change of use, renovation/refurbishment/extension applications) in the borough of: • Zero Emission ASHP, Heat Battery Boilers, and Electric Boilers for the supply of space heating and hot water • Zero Emission Electric induction cooking hobs instead of gas cooking hobs. • Waste Water Heat Recovery Systems (WWHRS), within homes and commercial organisations improves overall energy efficiency. Zero local Emission technologies such as Air Source Heat Pumps (ASHP), Ground Source Heat Pumps, Heat Battery Boilers, Electric Boilers and

A	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Emissions from developments and buildings										
	Expectation that major developments with frontage adjacent to the River Thames will investigate the potential for network heating options using water taken from and returned to the river. Expectation that major developments would utilize Battery Energy Storage Systems (BESS), Thermal Energy Storage Systems (TESS) and secondary waste heat energy sources such as from Waste Water (Sewerage), Electricity Substations, Underground Railway, Microbial Fuel Cells									Zero Emission secondary mains supply will be prioritised above combustion-based heating plant for all development in the borough including renovation/ refurbishment/ extension type planning applications. H & F is exploring the potential for net zero compatible district heat networks within the borough together with Kensington and Chelsea supported by the Local Energy Accelerator Programme. Zero local Emission secondary mains supply and Battery storage back up is considered more appropriate than carbon-based fuel emergency generators e.g. Diesel, Biofuel, HVO. Etc Pavement Kinetic Energy Recovery Systems (PKERS) this pavement technology is premised on a basic

A	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Emissions from developments and buildings										
	(MFC), Pavement Kinetic Energy Recovery Systems (PKERS) and Commercial Kitchen Ventilation Extractions Systems									principle that involves the conversion of footstep-pressure energy into renewable and Zero Emission electric power PKERS also promote active transportation and healthier living by encouraging walking and cycling. As pedestrians recognise the possibility of generating clean energy, they develop intrinsic motivation for environmental stewardship and community participation. LAEI 2019 data indicates Commercial cooking $PM_{2.5}$ emissions account for 23% of total $PM_{2.5}$ emissions in Hammersmith & Fulham. $PM_{2.5}$ Emission Control mitigation will be required for new Restaurants (Use Class E) and Takeaways (Sui Generis).

A	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Emissions from developments and buildings										
4	Enforcing Air Quality Neutral policies by placing conditions on all relevant developments.	AQ/PL	Normal business	1	✓	✓	✓	This is on-going and reported annually.	A set target of 100% of eligible developments submitting AQN assessments which demonstrate developments meet the benchmarks on submission. Number of air quality neutral assessments completed will be reported in the Annual Status Report.	Assessments must be in accordance with the Air Quality Neutral guidance available at Air Quality Neutral (AQN) guidance | London City Hall
5	Master-planning and redevelopment areas aligned with Air Quality	AQ/PL	Normal business	1	✓	✓	✓		A set target of 100% of developments submitting AQP	Enforcement of Air Quality Positive (AQP) guidance to ensure that benefits to air quality are maximised during the design phase. Improvements should go

A	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Emissions from developments and buildings										
	Positive and Healthy Streets approaches								assessments that are acceptable on submission.	beyond the Air Quality Neutral benchmark and minimum requirements to ensure reduced pollution exposure and benefits to the local community. AQP should be applied to master plans and development briefs for large-scale developments. It should highlight what measures have been taken throughout the design stages. Proposals should adopt the Healthy Streets Approach. Developments that will be required to follow AQP guidance include the Earls Court/ West Kensington development. AQP statement should be submitted as part of the EIA.
6	Ensuring adequate, appropriate, and well-located green space and infrastructure is included in new developments	PL	Normal business	2	✓	✓	✓	This is on-going and reported annually	Appropriate planning policy in place. Conditions securing policies	The Local Plan 2018 available to view at Local plan | LBHF, has a number of Borough wide policies on Green and Public Open Space: Policy OS1 on Protecting Parks and Open Space; Policy OS2 on Access to Parks and Open Space; OS3 on Playspace for

A	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Emissions from developments and buildings										
	Where appropriate, developers will have regard for planting and types of greening that is considered good for air quality								will be addressed through planning. Annual Authority Monitoring Report will record: OS2 –Access to parks and open spaces- no Net loss OS4 - Net change to area of nature conservation interest- no net loss OS5 - Number of permissions granted for garden land development-no net loss of back,	Children and Young People; OS4 on Nature Conservation and OS5 on Greening the Borough. These ensure that the council will protect, enhance, and increase provision of parks, open spaces and biodiversity in the borough. GLA air quality and green infrastructure guidance, see Using Green Infrastructure to protect people from Air Pollution, GLA 2019

A	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Emissions from developments and buildings										
									front and side gardens. All reported in Annual Status Report	
7	Ensuring the Smoke Control Area (SCA) is appropriately identified and fully promoted and enforced including a review of the air pollution impacts of approved appliances and fuels and potential local restrictions. The Council's default position with the new borough wide Smoke Control Order (SCO) 2024 will be **refusal** for developments	AQ/EH	Normal business	2	✓	✓		2025 and Ongoing.	A set target of 100% of smoke complaints responded to within 2 hours. Other metrics we will report on: A minimum of 1 digital communication campaigns to enforce/promote the smoke control zone per year. A minimum of 100 people engaged	This will include information provided to residents and businesses on smoke control using the council's website Air quality | LBHF or enforcement activity by the council of legislation. The councils boroughwide SCO 2024 came into operation on the 7th October 2024. Particulate matter associated with wood burning and from bonfires has been a factor in pollution events in London which requires further review and potentially local measures to control them. This action commits the council to investigating the feasibility of a local byelaw for the boroughwide Prohibition of the outdoor Burning of Domestic and Garden Waste. See link

A	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Emissions from developments and buildings										
	including **solid fuel/ wood burning stoves**								with through communications activities per year. The Council aims to have a new trading standards officer fully trained in the new solid fuel regulations by April 2025. A minimum of 24 fuel suppliers to be directly engaged with per year.	Create register of new and approved appliances in the borough. Air Quality Officer to attend GLA wood burning working group and feed into GLA guidance produced and ensure issues relevant to the borough are included. H&F Council is part of a Defra Funded London Wood Burning project (LWBP) with 15 other London boroughs. The project seeks to significantly enhance the evidence base and develop a set of campaign messages and an awareness-raising approach to achieve real progress in reducing emissions and pollution exposure from domestic solid fuel burning. H&F is also part of MAQF LWBP2 that is in respect to enforcement for SCA's in 17 partner boroughs in London.

A	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Emissions from developments and buildings										
										Officer training for the enforcement of the Clean Air Act in Smoke Control Areas to be provided by the project was completed in November 2024. Further training will also be provided in 2025 and 2026. Regarding the refusal for applications with wood burning / solid fuel burning, GLA Air Quality Neutral guidance states that the use of these types of combustion result in an immediate non-compliance of the AQN requirements.
8	Promoting and delivering energy efficiency retrofitting projects in workplaces and homes in the Council's own stock (Including using the GLA RE:FIT (Retrofit Accelerator: Workplaces)	CP/HS/CU	Normal business and external funding	1	✓	✓	✓	2026	The council aims to be carbon neutral by 2030. This project is working in conjunction with this target.	The council has signed up to take part in Re-fit (Retrofit Accelerator: Workplaces) for the corporate estate (more information on RE:FIT is available at Retrofit Accelerator - Workplaces | London City Hall), and that work has begun to decarbonise our corporate estate.

A	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Emissions from developments and buildings										
	programme) to replace old polluting heat and energy plant with new zero emission plant (e.g. Air source heat pumps (ASHP), electric boilers, electric induction cooking hobs,); and top-up lost insulation in combination with other energy conservation measures such as Waste Water Heat Recovery Systems. We will also seek to quantify the air quality impacts as well as the carbon impacts of major refit / retrofit projects, to ensure the								Annual organisational carbon audit. Number of projects delivered reported in Annual Status Report.	Our new Civic Campus is to have a ground source heat pump along with other energy efficiency measures. H&F social housing retrofit strategy underway, setting out a roadmap for decarbonising the council's stock up to 2030. This will include approaches to retrofitting with energy efficiency measures and low or no carbon energy systems. Decarbonisation of Social Housing - Innovation Partnership Prototype Phase – EnergieSprong Whole House Retrofit. 2021/22 Upgrade of 27 properties in the West Kensington Estate to make them highly energy efficient and drastically reduce the carbon emitted by each house. (Housing accounts for up to 35% of LBHFs carbon emissions) London Community Energy Grant secured to conduct feasibility studies

A	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Emissions from developments and buildings										
	co-benefits of work in this area is captured.									across 5 sites to instal solar PVs on council assets through Hammersmith & Fulham Community Energy.
9	The council to exercise its enforcement powers to ensure that developers fulfil commitments in delivering tree planting plans; also, to seek ways of maintaining mature tree cover when planning for new developments.	PL	Normal business	3	✓	✓	✓	Included in council planning policies and standard planning conditions. This is on-going and will be reported annually.	Compliance with conditions will be monitored. All relevant measures will be recorded in the Annual Status Report. A minimum of 100 street trees to be planted per year for 2025-2030 dependent on Funding The council will require 100 % of developers to fulfilling their tree	Planning Policy OS5 states that the council will seek to enhance biodiversity and green infrastructure in the borough, including by: • Seeking to prevent removal or mutilation of protected trees. • Seeking retention of existing trees and provision of new trees on development sites • Adding to the greening of streets and the public realm. The council also sets out in the Local Plan 2018 its vision of there being more street trees by 2035. Types of tree and street canyons – GLA guidance can be found on this.

A	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Emissions from developments and buildings										
									planting commitments.	
10	Support residents by providing energy efficiency advice and by installing small, low-cost energy efficiency measures as part of the H&F Healthy Homes Scheme and any future similar initiatives, that may be delivered as a microgrant to residents funded via the Household Support Fund (HSF). Reduce residents' energy bills and carbon footprint through home energy visits by trained green experts.	EH	Normal business	1	✓		✓	This is on-going and reported annually.	Approval of funds from the current annual HSF towards the microgrant scheme aims to support 500-1000 resident homes with small energy efficiency measures per year from 2025 Number of residents to which advice provided and number of efficiency measures installed will be reported in the	Further information is available on the council's webpages at H&F Healthy Homes

A	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Emissions from developments and buildings										
									Annual Status Report. A set target for fuel poverty to be less than 10% in each ward by 2026, and less than 5% in each ward by 2028. Progress towards this to be reported annually. A set target for 50% of eligible homes to have been engaged by 2025, including in-person advice sessions, home visits and resident forums, and	

A	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Emissions from developments and buildings										
									100% of eligible homes by 2028.	
11	The council and other decision makers to keep under review new environmental initiatives and best practices as these come forward.	PL	Normal business	3	✓	✓	✓	This is on-going and reported annually.	Number of activities completed will be reported in the Annual Status Report.	This will ensure that we are gathering information on environmental best practice across the council. Consultation responses will be reviewed, and a summary report produced each year as to why an initiative was taken/ not taken forward as a new action when the Air Quality Action Plan is reviewed annually.

ID	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Public health and awareness raising										
12	Director of Public Health (DPH) taking shared responsibility for borough air	PH	Normal business	n/a				On-going commitment	Minimum of one briefing provided per year to Public Health.	• Air Quality Officers will ensure that the DPH regularly briefed on the scale of the problem in

ID	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Public health and awareness raising										
	quality issues and implementation of Air Quality Action Plans. We will also report on the impacts of the Better Air, Better Health partnership								Air Quality Action Plans formally signed off by the Director of Public Health. Number of projects supported by Public Health team to be reported in Annual Status Report. Public Health Officer to sit on air quality steering group. Public Health to be included in scoping of potential projects to ensure outcomes focused approach to projects and interventions.	Hammersmith & Fulham, what is being done, and what is needed. • Public Health Officials are actively involved in air quality engagement with local stakeholders (businesses, schools, community groups and healthcare providers). • Public Health feed into wide range of messages to ensure they are consistent with a public health approach. • Air Quality information is contained within Joint Strategic Needs Assessment (JSNA) and Health & Wellbeing Strategy 2024-2029 https://democracy.lbhf.gov.uk/documents/s128946/Appendix 1 - HF Health Wellbeing Strategy 2024-2029.pdf .
13	Raise awareness of the impact of indoor air quality on health,	AQ/ CU	Normal business	n/a	✓	✓		This is on-going and reported annually.	Projects we are part of and have completed to be reported in Annual	Include regularly updated content on indoor air quality on the council's air quality webpages Air quality | LBHF Apply for external funding from Defra Air

ID	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Public health and awareness raising										
	and actively seek projects in this area. This action may include the production of new guidance, working with partners on behaviour change projects, utilising new indoor pollution monitoring technologies in a number of different environments, and projects to encourage the uptake of electric Induction hobs instead of natural gas fuelled cooking hobs. This action also includes work to								Status Report, alongside KPIs and targets. We expect to complete one awareness based project per year.	Quality Grant and Mayors Air Quality Fund to undertake projects to raise awareness of the impact of poor indoor air quality. We will also seek new funding routes for the London Home Air Monitoring Project, which was accepted for Defra funding in 2024 before all Defra 2023/2024 funding was stopped in March 2024. To reduce carbon-based gas connections and to ensure adequate levels of indoor air quality the council shall as part of the planning and development control process encourage the use of Zero Emission electric induction cooking hobs instead of gas cooking hobs. As cooking with gas hobs release the air pollutants Nitrogen Dioxide (NO_2), Carbon Monoxide (CO), Benzene, in addition to the climate change gas Methane.

ID	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Public health and awareness raising										
	ensure that indoor air pollution emissions are minimised from the operation of the Council's new Civic Campus.									
14	Engagement with businesses to increase workplace travel plans and implement local air quality improvement measures. This may include work with businesses with commercial kitchens to reduce emissions from cooking activities.	TR/ AQ	Normal business and external funding from Mayor's Air Quality Fund and Defra Air Quality Grant	3	✓	✓	✓	This is ongoing and reported annually	The Council aims to engage all new businesses on workplace travel plans via its planning process and has set a target of engaging 30 businesses per annum. A minimum of 10 Businesses per year will be encouraged to use air quality footprinting tools	The council actively pursues opportunities to secure funding for projects for business engagement. The council has been part of joint bids with other councils and organisations for externally funded projects with Cross River Partnership as part of the Clean Air Better Business (CABB) Clean Air Villages 1,2,3 and 4, clean air logistics for London and Smarter Greener logistics projects Smarter Greener Logistics - Cross River Partnership. Outcomes from these Cross River Partnership projects have included an ultra-low emission supplier directory that businesses can utilise, click and collect

ID	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Public health and awareness raising										
										and low pollution routes. Such projects have involved working with partner organisations such as Hammersmith London Business Improvement District (BID), Fulham BID and Shepherds Bush Business Forum. As part of previous projects Clean Air Villages 2 and 3, The council worked with Zipcar, Business Improvement Districts (BIDs) and Cross River Partnership to launch electric van services for small businesses in Fulham and Shepherds Bush, to reduce air pollution from local businesses. Two Breathe London Air Quality Sensors have been placed at north end road and three on King Street as part of the evaluation of the impact of the recent projects. Hammersmith& Fulham is a member of the London Commercial Cooking Working group that will be exploring

ID	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Public health and awareness raising										
										ways to gather an evidence base and mitigate the impact of Particulate emissions from commercial kitchens and markets on Local Air Quality. LAEI 2019 data indicates Commercial cooking PM2.5 emissions account for 23% of total PM2.5 emissions in Hammersmith & Fulham.
15	Improve and develop the Council's information on air quality online. Promotion of availability of airTEXT and clean air route finder. This includes working with healthcare partners to increase the range and uptake of the service.	AQ/PH	£1000 per year	3	✓	✓	✓	This is ongoing and reported annually	The Council has a target to promote airTEXT services at a minimum or 20 events per annum. The Council also aims to promote the service via social media at least once a month. From the above targets, a goal has been set to increase uptake of the	Activities include messages on the council's website and through social media channels and distribution of information at council events. Information is provided on the council's air quality webpages Air quality | LBHF AirTEXT is promoted to vulnerable groups through local GPs and other health care professionals.

ID	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Public health and awareness raising										
									airTEXT service by 10% per annum. Providing an easy breakdown of all the air pollution data on the Hammersmith and Fulham website in a visual and engaging way by December 2026.	
16	Implement School Streets in the borough	Ed/CU/TR/AQ	Normal business and external funding from Defra	2	✓	✓		Ongoing and reported annually	A minimum of 6 schools with school streets per year. Monitoring and evaluation of the school streets programme	The council is implementing school streets in tranches across the borough on a trial basis. Three School Streets Plus trial schemes were introduced at three primary schools in September 2024 and November 2024 with more to follow in 2025. These will be implemented under our School Streets Plus programme which looks not only at school streets but at other

ID	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Public health and awareness raising										
										measures which can be taken around school sites to help improve air quality.
17	Encourage schools to join TfL's school travel planning programme and GLA's Healthy Schools' London Programme by providing information on the benefits to schools and supporting the implementation of such programmes.	TR/PH	Normal business	2	✓	✓	✓	This is ongoing and reported annually	6 new schools per school year from 2025-2030 will be actively engaged with to register for the TFL Travel for Life accreditation programme. The accreditation level achieved will be reported in the Annual Status Report.	Currently there a total of 21 schools in H&F taking part in the TFL Travel for Life Scheme. There are 2 x nurseries, 16 Primary Schools, 2 x Secondary Schhols including 1 x SEN school 10 x Schools have a Gold accreditation 4 x Schools have a Silver accreditation 6 x Schools have a Bronze accreditation Information on school travel plans is available at Travel plans | LBHF The Healthy Schools Programme is detailed at Healthy Schools London | Healthy Schools
18	Air quality at schools: delivering the Mayor's Air Quality Fund money	Ed/CU/TR/AQ	Normal business and external	3	✓	✓	✓		30 Primary Schools have received School Air Quality Audits. A minimum of	Defra Air Quality Grant funding was obtained which enabled us to complete AQ Audits for all 30 interested schools by the end of 2023.

ID	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Public health and awareness raising										
	we have received to deliver air quality audit recommendations and support our School Streets Plus work (see action 16) Focus on air quality at schools- through delivery of air quality teaching sessions with schools and air quality audits. Worked to provide more audits for other schools in polluted areas. Ensuring schools participate in the GLA's school		funding including GLA (£400k from the Mayor's Air Quality Fund)						four Schools per year at which Implementation of the key recommendations will be reported in the Annual Status Report. A minimum of 5 audited schools shall be supported from MAQF 4 to deliver key recommendations from the audits by 2027.	Opportunities to fund recommendations of school audits will be identified and bids submitted. The council's successful borough bid for Mayor's Air Quality Funding round 4 will be used by the council to implement the recommendations from the School Air Quality Audits at a minimum of 5 Primary schools across the borough during 2024-2027 Urbanwise environmental charity partnered with the Council's Smarter Transport Team on the Mayor of London funded School Superzone project at Wormholt Primary School and St John XXIII Catholic Primary School.

ID	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Public health and awareness raising										
	ventilation and filtration programme.									
19	Raise awareness of the impact of individual behaviour on air quality within the council and to the public including events such as National Clean Air Day.	AQ	Normal business	3	✓	✓		2023	The Council aims to raise awareness of Air Quality issues at a minimum of 20 public events per year, and at 6 internal events per year.	The national clean air day webpages are available at Clean Air Day - the UK's largest clean air campaign The council will put messages on website and on twitter when notified of air pollution alert.
20	Public air pollution alerts and forecast to be made more widely available.	AQ	Normal business	3	✓	✓		2024	Target: 100% of moderate and high pollution alerts disseminated through local channels. We will also work to increase the reach to vulnerable groups via	The council will put messages on website and on social media channels when notified of air pollution alert.

ID	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Public health and awareness raising										
									Public Health colleagues.	
21	Lobby central government to retain and improve air quality legislation to make national objectives more stringent.	AQ	Normal business		✓	✓		This is ongoing and reported annually	Number of responses to consultations reported in the Annual Status Report.	The EU Withdrawal Agreement Act 2020 regulations make amendments to air quality legislation. Air Quality target levels in the new act are considered more stringent and specific to UK's circumstances than EU regulations. The Environment Act 2021 and the creation of the Office for Environmental Protection holds all public authorities, including councils, accountable when failing to comply with local air quality management framework post-Brexit.
22	Lobby central government to meet World Health Organization (WHO) 2021 air quality guidelines	AQ	Normal business		✓	✓		2024 and Ongoing	Number of responses to consultations reported in Annual Status Report.	Lobbying with London Councils and the GLA for changes to include legally binding target for Fine Particulates ($PM_{2.5}$), Particles (PM_{10}) and NO_2 in line with World Health Organisation (WHO) 2021 guidelines.

ID	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Public health and awareness raising										
23	Lobby tyre, brake and clutch manufacturers to use materials which reduce small particles released through wear.	AQ	Normal business			✓		This is ongoing and reported annually	A minimum of 2 Emails written/ enquiries will be made per year regarding the use of tyres/ brakes/clutch that release fewer particles.	Officers meeting with car clubs and businesses take the opportunity to raise this issue and push for change. In 2023 Imperial College researchers released a report on the sources and impacts of tyre wear emissions under their broader Transition to Zero Pollution Initiative. The report calls for further research on methods of measuring and combating non-exhaust emissions from vehicles, and for closer collaboration between researchers, industry and policy makers. Officers will lobby for further research and closer ties with partners in the commercial and academic sector to push for stronger data on tackling non-exhaust emissions. Report available at: Tyre Wear Particles, Imperial Zero Pollution. Emissions Analytics have conducted research on tyre emissions to promote a

ID	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Public health and awareness raising										
										data-centred approach for best practice when reducing PM emissions with regards to; driving style; driving speed; tyre composition; and tyre age. Officers will utilize this data to inform their lobbying with stakeholder groups. Further information available at: Tread Pollution from Tyre Wear. In 2022, the RAC commissioned and published a report on break wear emission of EVs and best practice in reducing break wear emissions. Officers will utilize reports to take a data driven approach to raising awareness of brake emissions and best practice. Report available at: RAC EV Tyre and Brake Emissions.
24	Raise awareness, reduce exposure and target AQ issues affecting vulnerable groups via the Hammersmith &	CU	Normal business			✓	✓	Ongoing with an end target of 2030.	By 31st December 2025 50% of eligible homes to be engaged via targeted communications.	There is a significant overlap in the borough between areas that are less affluent, areas with higher rates of disparities issues, and areas of existing poor air quality. There is also strong evidence to suggest that the most

ID	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Public health and awareness raising										
	Fulham Fuel Poverty Strategy.								By 2026 there will be fewer than 6,000 homes in fuel poverty in the borough according to the LILEE definition. Rates of fuel poverty will be less than 10% in each ward. By 2028 all homes in fuel poverty will have been engaged via targeted communications. By 2030 the rates of fuel poverty will be less than 5% in each ward of the borough.	vulnerable residents are also usually the most heavily affected by air pollution. The council will therefore utilize its pre-existing and ongoing fuel strategy apparatus to reach out to these groups, raise awareness of AQ issues, and help vulnerable residents reduce their exposure. The council's Fuel Poverty Strategy outlines four key objectives: 1. To reduce bills for residents by improving the energy efficiency of the H&F housing stock, reducing carbon emissions from housing, and improving air quality. 2. To improve the process for identifying fuel poor residents and provide targeted support in the short and long term. 3. To develop, improve and maximise existing services within the council that support fuel poor residents.

ID	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Public health and awareness raising										
										4. To empower residents to be aware of the support that is available and how they can act independently. The council is working closely with the National Energy Foundation and Better Housing Better Health to achieve these goals.
25	Collaborate with public and academic partners to make use of existing frameworks and raise awareness amongst residents regarding AQ issues.	CU	Normal Business.		✓	✓		Ongoing.	A minimum of 4 Activities of the partnership reported annually. Reporting on the production of new guidance and materials to help residents and visitors make changes to reduce their exposure to pollution and to reduce their own emissions.	In 2023 Hammersmith & Fulham formed a new partnership, Better Air Better Health, with Imperial College London's Environmental Research Group, and Imperial Trust NHS to progress action on improving air quality in the borough. The partnership will focus initially on raising awareness in the community on poor air quality, understanding the impact of air pollution on different groups, and progressing actions outlined in this AQAP to improve air quality. H&F is one three London boroughs partners involved in the AWAIR (awair-project.org) pilot project, that started in

ID	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Public health and awareness raising										
										October 2024. This is an initiative in White City neighbourhood of Hammersmith supported by Impact on Urban Health aimed at raising public awareness of air quality in London through the piloting of co-designed, solar-powered outdoor displays that communicate hyperlocal air quality conditions.

ID	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Delivery Servicing and Freight										
26	Update of procurement policies to reduce pollution from logistics and servicing. Investigate the potential for air quality to be included in the	AQ/ PR	Normal business	3	✓	✓	✓	Procurement policy document for air quality completed by 2024	Target: 100% of relevant procurements to include air quality requirements. Metric:	The fleet operator recognition scheme webpages are at FORS Homepage - FORS - Fleet Operator Recognition Scheme (fors-online.org.uk) Initial step would be to develop a procurement policy document for air quality that would be available on the council's

ID	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Delivery Servicing and Freight										
	council's circular economy work moving forward. Updated policy should require that suppliers have Fleet Operator Recognition Scheme (FORS) accreditation and suppliers have sustainable logistical measures in place (and include requirements for preferentially scoring bidders based on their sustainability criteria)								A minimum of 10 activities per year completed to work towards achieving this action will be reported in the Annual Status Report.	intranet procurement pages. The document would provide advice to departments about to enter contracts for services.
27	Reducing emissions from deliveries to council buildings, local businesses and residents	TR/AQ	Normal business plus funding from GLA	3	✓	✓	✓	This is on-going and reported annually	The Council has set a target to engage 125 businesses per annum regarding the reduction of	In addition to work discussed action 17 engagement with businesses. The council was successful in their bid to MAQF round 3 funding for Hammersmith Zero Emissions Network – support for businesses to

ID	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Delivery Servicing and Freight										
			and local business						emissions from deliveries. The number of activities completed to work towards achieving this action will be reported in the Annual Status Report.	switch to zero/low emission vehicles in Hammersmith. Hammersmith was awarded £50K of TfL's Healthy Streets Fund for Business, the council partnered with Hammersmith London BID and e-cargo bikes establish a new Zero Emission freight hub, called 'Parcels not Pollution' to enable businesses to receive and sort more deliveries at a single location. Reducing number of freight vehicles needed to service Hammersmith. The service launched in September 2019 using an e-cargo bike for the final leg of any deliveries to businesses in Hammersmith town centre. Parcels not Pollution services were expanded borough wide in April 2020. Along with expanding locations, delivery hours have also been

ID	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Delivery Servicing and Freight										
										extended and typically operates 9am to 10pm Monday to Saturday and 10am to 4pm on Sundays. The council was successful in an interborough consortium DEFRA Air Quality Grant bid for Clean Air Villages (CAV) 1, 2, 3 and 4 which included projects in Fulham and Shepherds Bush Town Centres. CAV projects focus on working with businesses and communities to make their deliveries and servicing more efficient.

ID	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Borough fleet actions										
28	Reducing emissions from council fleets (including council contractors)	BF/CU	Costs being assessed	2	✓	✓	✓	This is ongoing and reported annually	The council's target is for its council-owned fleet to be net zero carbon emitting by the end of this Action Plan. Council contractor fleet transitions will be as agreed on each contract and monitored through contract management. We will also work towards reporting on vehicle / car sharing for council services, and the use of	2029 is a realistic date to achieve net zero from the council's own fleet of cars and light delivery vehicles, to allow time to overcome difficulties around vehicle supply chain and development of the necessary infrastructure to support electric vehicles. Surveys have been completed at the main council depot and satellite depots and the council is working with UK Power energy providers to establish the amount of electricity we can draw down from the grid. Capital bids to fund the required works and infrastructure instalments are being considered. As of March 2025, 23% of the council fleet is pure EV, with 40% of long term leased vehicles being EVs. Officers are currently developing proposals and costs to transition all diesel vehicles, both council and contractor fleet, who fuel at Bagley's Lane depot to use HVO as an

ID	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Borough fleet actions										
									cargo bikes / e-bikes etc by council services	alternative fuel to attempt to mitigate the length of time to move to a net zero fleet. This may help to reduce carbon emissions from diesel vehicle by up to 90% The waste team is continuing to support the council's ambitious work to reduce our carbon footprint with the help of 20 new electric vehicles. The waste team's new fleet of 8 x E-cargo bikes, 9 x electric vans, 2 x cage trucks and 1 x electric bin truck that will be used as part of H&F's new garden waste collection service was launched in July 2024 in collaboration with our contractors. Our new waste contractor has provided a plan for fleet electrification by 2026-27, subject to requisite funding and charging infrastructure available. This timetable will be dependent on the development of the necessary infrastructure to support electric

ID	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Borough fleet actions										
										vehicles at the council's Bagley's Lane depot. Initial surveys have been completed at the main council depot to establish the amount of electricity we can draw down from the grid. Capital bids to fund the required works and infrastructure instalments are being considered. We consider that from the agreement of capital funding the necessary negotiations and works to electrify the depot to support the waste contract fleet would take approximately 18 months. A Transport User Group, reporting to the Chief Officer for Public Realm, has been convened to monitor these targets, as well as targets to reduce vehicle mileage and petrol/diesel fuel usage.
29	Reduce emissions from parks and grounds maintenance	PR	Normal Business		✓	✓	✓	Ongoing and reported annually	The council's target is for 75% of the ground maintenance	In 2027 the council will reassess its contract with its current grounds' maintenance contractor, at which point it will set an additional goal for

ID	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Borough fleet actions										
	by switching to electric vehicles and tools.								contractor's vehicles to be electric by 2027, along will all hand-held power tools.	electrifying its grounds maintenance fleet for the remaining two years of this AQAP.

ID	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Localised Solutions										
30	The council will increase tree, hedge and grass planting on council-owned land and highways.	HW	Normal council spending	2	✓	✓	✓	This is on-going and reported annually	Square Metres of additional greening installed will be reported in the Annual Status Report. Increase canopy cover from 14.5% to 16% by 2030, with a long term goal of reaching 23% by 2050. We also aim to plant an additional 100 seed grown trees in the borough per year to increase green connectivity. Two more Tiny Forests winter 23/24 subject to securing	The first steps will be to identify locations that would benefit from increased green infrastructure and choose appropriate trees/ plants. Previous experience from green infrastructure project from Mayor's Air Quality Funding could be used, this is discussed at Grass is greener for innovative Hammersmith cycle path scheme | LBHF Areas to be targeted are areas of high pedestrian footfall and large number of residential properties on high volume traffic routes and town centre locations. More general planting in the borough which will reduce carbon and potentially PM emissions include: All residents are encouraged to plant in their tree bases. Promoting and developing resources for residents to 'green the grey' in their private spaces

ID	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Localised Solutions										
									necessary grant funding. Further five Tiny Forests (to total 10) planned. Subject to securing appropriate sites and funding. a rate of 1 per year	is crucial. Guidance provided at Trees | LBHF London's first-ever tiny forest was planted in Hammersmith Park in March 2021, followed by tiny forests in Normand Park and Eel Brook Common in 2022 and Frank Banfield Park in April 2024 and Wormholt Park in December 2024 and Norland Open Space in February 2025. It plays a vital role in offsetting the daily carbon emissions produced by traffic. As part of H&F's climate and ecology action plan, the borough will work with land managers such as TfL to encourage the greening of potential wildlife corridors through the borough such as railway sidings and verges.
31	Implement opportunities for small scale LENs (Low Emission	TR	Normal business/ external	1	✓	✓	✓	2024	Clean air neighbourhoods implemented will	South Fulham Clean Air Neighbourhood implemented from July 2020. Restricting non-local traffic from passing through selected roads.

ID	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Localised Solutions										
	Neighbourhoods) and Low Traffic Neighbourhoods and investigate opportunities for funding of further projects following the positive impact of the trialled schemes to date in the borough.		funding secured						be reported annually. The number of activities completed to work towards achieving this action. E.g., Applying for future funding opportunities will be reported in the Annual Status Report.	Controlled areas are monitored by Automatic Number Plate Recognition (ANPR) cameras which check whether a vehicle using that road has an access permit. Across South Fulham, traffic has reduced by 23% and CO2 has been reduced by one tonne per day. The borough-wide Clean Air Neighbourhoods programme is an evolution of the South Fulham scheme with the aim of tackling public health and air quality. Successful implementation of Clean Air Neighbourhoods relies on transparent engagement with residents, significant data collection, and the delivery of public realm improvements. A Clean Air Neighbourhood trial in the streets to the west of Wandsworth Bridge Road came into effect in December 2022.It was made permanent in 2024. The council has implemented schemes to repurpose parking spaces with

ID	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Localised Solutions										
										parklets with benches and planters to form a barrier between pedestrians and vehicle emissions and create a more pleasant environment. Similarly build outs have been constructed outside several borough schools to widen pavements, providing more space for children and their carers to walk on, Brackenbury Primary School and Wendell Park Primary school have both seen improvements.

ID	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Cleaner Transport										
32	Ensuring that Transport and Air Quality policies are integrated.	TR/AQ	Normal Business	2	✓	✓	✓	2024	Provide examples in Annual status report where transport and air quality have liaised on policy or projects.	The council is currently scoping a new Transport Strategy.
33	Discouraging unnecessary engine idling by taxis, coaches and other vehicles through enforcement and awareness raising campaigns and carry out patrols in hotspot areas such as taxi ranks, bus stands and schools.	AQ/PS	Normal business and external funding from GLA and annual campaign cost of £10,000 per year	2	✓	✓	✓	This is ongoing and reported annually	The Council aims to raise idling issues at all its five traffic free events per year, and a minimum of four Climate events per year. KPIs may be established for: Number of drivers told to shut off engines; number of drivers fined for not shutting off engines; number	Previous action days for idling vehicles are shown at Clean Air Champions' successful action day to stop idling motorists in H&F | LBHF Further press and publicity activity planned to raise awareness. Since June 2023 Civil enforcement council officers have been handing out anti-idling leaflets to drivers when issued with their first warning on idling. The council have also updated their 'Report it' app to include stationary idling to further involve residents in efforts to reduce idling. enforcement powers are being used to fine motorists who pollute the borough

ID	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Cleaner Transport										
									of awareness raising campaigns completed to be reported in the Annual Status Report.	by leaving their engines running. The council's traffic wardens are able to issue an £80 penalty charge notice (£40 if paid within 14 days from the date of issue) to motorists who have stopped with their engine idling in parking and loading bays, taxi ranks, or any roads where waiting is restricted.
34	Hold regular active travel events to encourage modal shift.	TR	Normal business	2	✓	✓	✓	This is ongoing and reported annually	The Council has set a target to hold a minimum of 5 traffic free events in highstreets and town centres per annum. These include: 2x Hammersmith King Street Traffic Free Event; 2x Noth End Road Traffic Free Event;	H&F has recently refreshed its play street offering, making the application process easier for residents. We have worked with community organisations to add value and support to these resident lead events. Recent playstreets have been held at various locations around the borough. Playstreets are planned to take place at a number of schools in the borough over the coming months. We will continue to hold active travel events around the borough. This will include event that coincide with World Car Free day.

ID	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Cleaner Transport										
									1x Council Supported Wandsworth bridge Road Traffic Free Event Number of events completed to be reported in the Annual Status Report. The Council will continue to support Play Streets, and aims to hold a minimum of 5 Play Streets per year starting in 2024, and to increase this number by one	In addition, following the identification of funding and setting of annual targets, we will continue to hold behaviour change and awareness initiatives to encourage sustainable changes in travel behaviour, and provide 1:1 and group cycle training.

ID	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Cleaner Transport										
									on a yearly basis subject to annual review.	
35	Using parking policy to reduce pollution emissions	TR	Normal business	3	✓	✓	✓	This is ongoing and reported annually	Activities completed to work towards achieving this action to be reported in the Annual Status Report.	The council's Net Zero 2030 Parking Strategy introduces a number of emissions-based parking charges, including an additional surcharge for diesel vehicles, multipliers for second and additional permits, and using parking revenue to subsidise cycle parking to encourage modal shift. New resident parking permit and Pay and display parking emission-based charges came into effect on the 3rd February 2025. See H&F New Resident Parking permits and P&D pricing structure
36	Installation of Ultra-low Emission Vehicle (ULEV) infrastructure (electric vehicle charging points, rapid electric vehicle	TR	External to Council funding	1	✓	✓	✓	Ongoing and reported annually.	The Council has a target to remain one of the densest networks of	The Council has been successful in implementing one of the densest networks of EVCPs in London. The council will keep under review its ultra-low emission vehicle infrastructure.

ID	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Cleaner Transport										
	charging point and hydrogen refuelling stations)								EVCPs in London. Currently, every home or office within the borough is within 400 metres of a charging point (this figure does not include additional charging points on private land such as the Westfield shopping centre). The Council will use this metric, along with the ratio of ECVPs to brough population, to ensure it retains	The council has introduced a free-floating car club (Zip-car Flex) that has a minimum of 25% BEV vehicles in the fleet, and this is planned to grow and detailed in the contract agreement. The council are committed to working with car club providers to pursue opportunities to increase the percentage of Zero Exhaust Emission Vehicles used within their fleet in our borough. This will be achieved through negotiation with car clubs; we will not grant additional spaces or licences, or renew exiting licenses, of car clubs which do not co-operate in this.

ID	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Cleaner Transport										
									a sufficiently dense network that keeps up with demand.	
37	Provision of infrastructure to support walking and cycling. To enable more people to take up cycling to travel around the borough and to allow children to walk to school more easily. More safer cycle routes will be developed by the council and TfL. The council together with its strategic partners such as TfL, to develop plans to increase pedestrianisation,	TR	Normal business and external funding from DfT and TfL	1	✓	✓	✓	This is ongoing and reported annually	Number of activities completed to be reported in the Annual Status Report.	The Council's ambition is to have a high quality, safe cycle network across the whole borough made up of segregated cycle routes on main roads and quieter routes in residential neighbourhoods. A number of routes are already being planned. The council is currently in the design phase for the C34 from the Scrubs Lane junction with Du Cane Road along Wood Lane to Shepherd's Bush Green, providing approximately 1.35km of fully segregated cycleway. Construction is due to begin in Spring 2024 with a completion date set for Spring 2026. Funding is being sought for other routes, with potential opportunities in the east of the Borough

ID	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Cleaner Transport										
	cycling and greening in its town centres. Utilising parking revenue to subsidise cycling parking across the borough.								The Council aims to roll out a minimum of 500 cycle hangers across the borough over the next three years. This target will then be subject to review in 2027	arising from Earls Court and Olympia development. The council has now installed 100 cycle hangars as part of our programme to install 500 hangars by 2027, creating 3,000 new parking spots – one for every resident currently waiting for a space.
38	Work with and lobby the Mayor of London, GLA and TfL to take the necessary actions to improve air quality in the borough.	TR	Normal business	1	✓	✓	✓	This is ongoing and reported annually	Number of consultation responses and letters submitted to be reported in the Annual Status Report. We will explore the feasibility of Clean Air Neighbourhood trials, where there is resident support.	From 29 August 2023 the Ultra Low Emission Zone (ULEZ) was expanded again to create one single zone across all 33 London boroughs. We will explore the feasibility of further Clean Air Neighbourhood trials, including measures to improve air quality by reducing pollution and congestion. We will consult and engage on the possibility of introducing traffic restriction proposals in local neighbourhoods.

ID	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Cleaner Transport										
									Ensure a minimum of five H&F Primary Schools receive GLA funding for indoor air quality filters.	We will take all necessary actions and fully support proposals to expediate geofencing and bus fleet electrification in areas of poor air quality and high congestion. We will support e-cargo bike delivery and options for zero exhaust emission deliveries such as Walking Freight (Electrically Assisted) carriage Trolleys and encourage freight consolidation to reduce trips due to freight movements.

ID	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Monitoring and Other Core Statutory Duties										
39	Maintaining and where possible expanding air quality monitoring networks	AQ	Normal Business	2	√	√	√	This is ongoing and	Targets: Maintain the current level	In 2022 there were two continuous air quality monitoring stations Shepherds Bush Green (HF4) and Hammersmith Town Centre (HF5) measuring

ID	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Monitoring and Other Core Statutory Duties										
	and fulfilling other statutory duties. Undertaking an air pollution audit, similar to a carbon footprinting report, for the council, and updating this annually.							reported annually	of monitoring in the borough. Achieve over 90% date capture at automatic monitoring sites. Complete Annual Status Reports on time each year Report on annual air pollution footprint reporting.	nitrogen dioxide and particulate pollution continuously 24 hours a day Shepherds Bush (HF4) was upgraded in 2021 to include new PM10 and PM2.5 monitors. In 2023 as part of the Clean Air Neighbourhood programme, four new Air Quality Monitoring stations have been installed at Fulham Town Centre (HF6), Riverwalk (HF7), Wormwood Scrubs (HF8), and Sands End (HF9). These all include reference compliant equipment that monitor and measure the air pollutants Nitrogen Dioxide (NO_2), Particulates ($PM_{2.5}$, PM_{10}) and Ozone (O_3). H & F in 2023 have six PM2.5 monitoring locations compared to zero in 2018. The council is supportive of the use of Air Quality sensors to monitor air quality in the borough. Sensors will monitor air quality as part of the Clean

ID	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Monitoring and Other Core Statutory Duties										
										Air Neighbourhood programme. Vortex Air Quality sensors were placed in 500 locations across the borough as part of the programme. A total of 60 H& F funded Breathe London Air Quality sensors that monitor and measure the air pollutants Nitrogen Dioxide (NO_2), Particulates ($PM_{2.5}$,) have been installed across the borough, between 2022 to2025. 48 of these sensors have been installed near school entrances, including nurseries, primary and secondary schools. These air quality sensors are powered by solar panels. The Air Pollution Footprint Tool has been produced by Ricardo and the Clean Air Fund and is a free tool for organisations to track their air quality emissions.

ID	Action description	Who	Cost	Score	NO_2	PM	CC	When	How implementation will be monitored	Further information
Monitoring and Other Core Statutory Duties										
40	The council will work towards compliance by 2030 of the annual mean World Health Organisation (WHO) health-based Air Quality Guideline Values (2021) for NO_2, PM_{10} and $PM_{2.5}$	AQ	Normal business	2	√	√	√	This is ongoing and reported annually	Number of air quality assessments reviewed reported in the annual status report submitted to the GLA.	Air quality assessments submitted to planning department must reference the councils 2030 Annual Mean Air Quality Targets for NO_2 (10ug/m^{-3}), PM_{10} (15ug/m^{-3}) and $PM_{2.5}$ (5ug/m^{-3}) and the WHO based Air Quality guideline values (2021) for the air pollutants NO_2, PM_{10} and $PM_{2.5}$. Mitigation shall be required at homes, schools, workplaces or other development if there are exceedances of the councils 2030 WHO aligned Annual Mean Air Quality Targets for $N0_2$, $PM_{2.5}$ and PM_{10} and where current and future predicted pollutant concentrations are within 5% of these limits.

5. Further information and guidance

This section contains a wealth of extra information and guidance. It includes a checklist for actions you can take to improve air quality and reduce your exposure to pollution, whether you're an individual, community group, business or school.

Our website is the best place to find the latest and most up to date information and guidance: Air quality | London Borough of Hammersmith & Fulham (lbhf.gov.uk)

Recommendations for action for individuals and community groups

Air quality affects all of us. Here are 10 recommendations for actions you can take to improve air quality and improve your health and wellbeing:

Reduce your contributions to air pollution

1. Shop locally, and use **click and collect services to reduce unnecessary traffic emissions.**
2. **Walk, cycle** and take **public transport** when you can.
3. Never leave your **vehicle engine idling** when you're stationary or parked.
4. **Improve the energy efficiency of your home**, which will also reduce your carbon emissions and reduce your energy bills.
5. Think about **indoor air pollution**, whether that's through **increasing ventilation of your kitchen while cooking**, or changing from a **gas hob** to an **electric induction cooking hob.**

Reduce your exposure to air pollution

6. Take quieter **low road vehicle traffic routes** when you **walk** and **cycle** – use this as an opportunity to explore green spaces and parks that are on your way.
7. Sign up to pollution alert systems such as airTEXT: airText - Air pollution forecasts for Greater London, Chelmsford and Colchester

Use your voice!

8. Talk to us - use our Report It function on our website to raise issues with us such as dust from construction sites, unnecessary vehicle idling, and more: Report it | London Borough of Hammersmith & Fulham (lbhf.gov.uk)
9. Support national events such as Clean Air Day, take part in community monitoring such as the Breathe London project, and respond to consultations and surveys from government (and from Hammersmith & Fulham council!)
10. Talk to people you know about pollution and its impact on health.

Recommendations for action for businesses

Air pollution is bad for business, and bad for the wider economy. Here are 10 recommendations for actions businesses can take to improve air quality.

Reduce workplace exposure to air pollution

1. **Ensure your buildings are well ventilated**, well maintained, and clean and dust free.

2. Use official guidance such as from the British Safety Council to protect the health of your employees – this is particularly important for outdoor workers: Information for Employers | British Safety Council | British Safety Council (britsafe.org)

3. Use 'low VOC' and 'non-toxic' cleaning products in the workplace.

4. Communicate to your employees about air pollution, including indoor air pollution for those working remotely or flexibly.

Reduce your contributions to air pollution

5. Encourage staff to **walk, cycle or take public transport** to work.

6. Look at the number and type of deliveries made to your business – use **Zero Emission last mile delivery couriers**, or consolidation centres.

7. Use **green renewable energy providers** and environmentally sustainable products throughout your business.

8. Utilise funding opportunities and chances to take part in larger projects – if your business is in a Business Improvement District area, they are a great place to start

9. Get in touch with the council and become a **Climate Alliance member** – a network of businesses across H&F working together to reduce their environmental impact: H&F Climate Alliance

10. Use the **Air Pollution Footprint** online tool to calculate and track your air pollution emissions in the same way you might already capture your carbon footprint.

Recommendations for action for action for schools

Air pollution disproportionately affects young people. Schools can also contribute to pollution, as well as being powerful influencers and advocates for change. Here are 5 recommendations for actions schools can take to improve air quality.

Reduce your contributions to **air pollution**

1. Utilise the **School Air Quality Audit report** every school in the borough has received to work out what actions you could take to reduce emissions.
2. Have a **School Travel Plan**, and encourage pupils to **walk, cycle** and take **public transport** to school.
3. Get in touch with the Council about having a **School Street** – timed road closures at the beginning and end of the school day.
4. Use a variety of free lesson plans and other materials to incorporate **air quality** into the curriculum.
5. Teachers can also be part of the council's environmental network to learn and share best practice with peers from schools across the borough.

Further achievements from previous air quality action plan

- The council established a resident-led Air Quality Commission. The commission engaged with external experts and residents in examining the causes and dangers of local air pollution and proposed potential solutions to help reduce the concentration of air pollution in Hammersmith & Fulham. The final report was received by Cabinet on 7 November 2016 and many recommendations are currently being implemented.
- The council used Local Implementation Plans (LIPs) to match fund MAQF projects including integrating greening measures to improve local air quality and sustainable drainage along a busy road in Hammersmith Town Centre.
- We ensured that all approved major planning applications have been required to meet the Mayor's requirements relating to Air Quality neutral and combustion-based Energy Plants.
- The air quality policy within our Local Plan 2018 was amended to include all developments that have the potential to be impacted by local air quality (previously restricted to major developments). Consultation responses are provided to planning on all relevant applications.
- Secured S106 funding for officers to deal with Air Quality planning submissions and monitoring at major sites in the borough including the Earls Court Opportunity Area and Thames Tideway Tunnel sites.
- Minimised the impact of fugitive emissions by requiring developments to produce and implement Air Quality Dust Management Plans (AQDMP).
- Required all developments to ensure that all non-road mobile machinery (NRMM) operating on demolition and construction sites complies with London's NRMM Low Emission Zone requirements.
- Installed Breathe London air quality sensors across South Fulham as part of the SW6 Clean Air Neighbourhood scheme, which has allowed the council to assess the impact of the scheme on pollution levels.

Air Quality and Planning

Paragraph 96 of the National Planning Policy Framework (NPPF) 2024 states

Planning policies and decisions should aim to achieve healthy, inclusive and safe places which:

a) promote social interaction, including opportunities for meetings between people who might not otherwise come into contact with each other – for example through mixed-use developments, strong neighbourhood centres, *street layouts that allow for easy pedestrian and cycle connections within and between neighbourhoods*, and active street frontages;
b) are safe and accessible, so that crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion – for example through the use of well-designed, *clear and legible pedestrian and cycle routes, and high-quality public space*, which encourage the active and continual use of public areas; and
c) enable and support healthy lives, through both *promoting good health and preventing ill-health*, especially where this would address identified local health and well-being needs and *reduce health inequalities between the most and least deprived communities* – for example through the *provision of safe and accessible green infrastructure*, sports facilities, local shops, access to healthier food, allotments and *layouts that encourage walking and cycling*.

Paragraph 109 of the National Planning Policy Framework (NPPF) 2024 states

Transport issues should be considered from the earliest stages of plan-making and development proposals, using a vision-led approach to identify transport solutions that deliver well-designed, sustainable and popular places. This should involve:

a) making transport considerations an important part of early engagement with local communities.
b) ensuring patterns of movement, streets, *parking and other transport considerations are integral to the design of schemes*, and contribute to making high quality places.
c) understanding and addressing the potential impacts of development on transport networks.
d) realising opportunities from existing or proposed transport infrastructure, and changing transport technology and usage – for example in relation to the scale, location or density of development that can be accommodated.
e) *identifying and pursuing opportunities to promote walking, cycling and public transport use*; and
f) *identifying, assessing and taking into account the environmental impacts of traffic and transport infrastructure* – including appropriate *opportunities for avoiding and mitigating any adverse effects, and for net environmental gains*.

Paragraph 110 of the National Planning Policy Framework (NPPF) 2024 states

The planning system should actively manage patterns of growth in support of these objectives. *Significant development should be focused on locations which are or can be made sustainable*, *through limiting the need to travel and offering a genuine choice of transport modes*. *This can help to reduce congestion and emissions, and improve air quality and public health*. However, opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making.

Paragraph 165 of the National Planning Policy Framework (NPPF) 2024 states

To help *increase the use and supply of renewable and low carbon energy and heat*, plans should:

a) provide a positive strategy for energy from these sources, that *maximises the potential for suitable development, and their future re-powering and life extension*, while ensuring that adverse impacts are addressed appropriately (including cumulative landscape and visual impacts)
b) consider identifying suitable areas *for renewable and low carbon energy sources, and supporting infrastructure*, where this would help secure their development; and
c) identify opportunities for development to draw its *energy supply from decentralised, renewable or low carbon energy supply systems* and *for co-locating potential heat customers and suppliers*.

Paragraph 167 of the National Planning Policy Framework (NPPF) 2024 states

In determining planning applications, local planning authorities should give significant weight to the need to support energy efficiency and low carbon heating improvements to existing buildings, both domestic and non-domestic (including through installation of heat pumps and solar panels where these do not already benefit from permitted development rights**)**. Where the proposals would affect conservation areas, listed buildings or other relevant designated heritage assets, local planning authorities should also apply the policies set out in chapter 16 of this Framework.

Paragraph 187-part (e) of the NPPF (2024) states:

Preventing new and existing development from *contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of* soil, *air,* water or noise *pollution* or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans.

Paragraph 199 of the NPPF (**2024)** states:

Planning policies and decisions should sustain and contribute towards *compliance with relevant limit values or national objectives for pollutants*, taking into account the presence of ***Air Quality Management Areas*** and Clean Air Zones, *and the* ***cumulative impacts from individual sites in local areas***. *Opportunities to* ***improve air quality or mitigate impacts should be identified****, such as through traffic and travel management, and green infrastructure provision and enhancement*. So far as possible these opportunities should be considered at the plan-making stage, to ensure a strategic approach and limit the need for issues to be reconsidered when determining individual applications. ***Planning decisions should ensure that any new development in Air Quality Management Areas*** *and Clean Air Zones* ***is consistent with the local air quality action plan***.

***PM2.5 Targets: Interim Planning Guidance,* DEFRA, 20th November 2024**

These targets require a different approach to that used by applicants and Local Authorities in response to existing air quality legislation. The new approach moves away from a requirement to assess solely whether a scheme is likely to lead to an exceedance of a legal limit and instead ensures that appropriate mitigation measures are implemented from the design stage, streamlining the process for planning and ensuring the **minimum amount of pollution is emitted** and that **exposure is minimised**.

This applies to all developments which would normally require an air quality assessment. More detailed assessments are expected for developments which are closer to populations, and those which are likely to have higher emissions.

Planning Authorities are encouraged to consider the **cumulative impact of development** both in **developing their Local Plan** and **when making decisions on a case-by-case basis**. Whilst contributions from individual developments may be small, cumulatively they can lead to an increase in regional exposure, and so will have public health impacts and affect progress towards the targets.

***Paragraph: 002* Reference ID: 32-002-20191101 of the National Planning Policy Guidance (2019)** states the following in respect 'What is the role of plan-making with regard to air quality':

ways in which *new development could be made appropriate* in locations where *air quality is or is likely to be a concern*, and not give rise to *unacceptable risks from pollution*. This could, for example*, entail identifying measures for offsetting the impact on air quality arising from new development including supporting measures in an air quality action plan or low emissions strategy* where applicable.

***Paragraph: 005* Reference ID: 32-005-20191101** of the **National Planning Policy Guidance (2019)** states the following in respect to 'When could air quality considerations be relevant to the development management process':

whether *occupiers or users of the development could experience poor living conditions or health* due to *poor air quality*

***Paragraph: 006* Reference ID: 32-006-20191101** of the **National Planning Policy Guidance (2019)** states the following in respect to 'What specific issues may need to be considered when assessing air quality impacts':

Expose people to harmful concentrations of air pollutants, including dust. This could be by *building* ***new homes, schools, workplaces or other development*** *in* ***places with poor air quality***.

Air Quality and Inequalities

Index of Multiple Deprivation (IMD)

The GLA 2023 update of Air Pollution and Inequalities in London details that the most deprived communities of London still more commonly live in the most polluted areas. This distribution is often explained by the high urban concentrations produced by road transport sources, which coincides with the fact that a high proportion of deprived communities are in urban areas. However, the update found that concentrations have also declined faster in areas of deprivation and more significantly since 2016. The update also notes that inequality in exposure to air pollution is less in inner London areas such as Hammersmith and Fulham than in outer London.

The update also found that communities living along red routes are exposed to higher air pollutant concentrations, with red routes being designed for main traffic. Red route populations are likely to be the last places in London to meet the WHO interim target (20 µg/m3) unless further action is taken. The A4 and A40 running through the borough are both red routes. The red route population for the whole of London exposed to NO2 concentrations exceeding the WHO interim guideline and the councils 2030 target of 20 µg/m3 is forecast to reduce from 100% (1.1 million) in 2016 to 76% (1 million) in 2025 and to 19% (0.2 million) in 2030. WHO global air quality guidelines: particulate matter (PM2.5 and PM10), ozone, nitrogen dioxide, sulfur dioxide and carbon monoxide

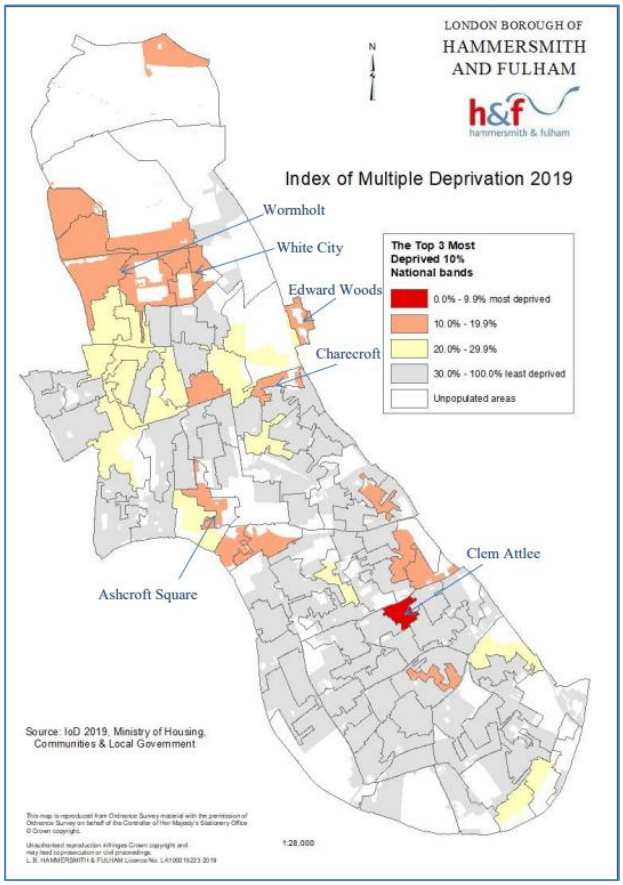
Together with the air quality focus areas that have been identified in Hammersmith and Fulham, discussed earlier in the action plan, it is important to be conscious of those areas identified with high deprivation as we undertake work to improve air quality and reduce exposure to air pollution in the borough.

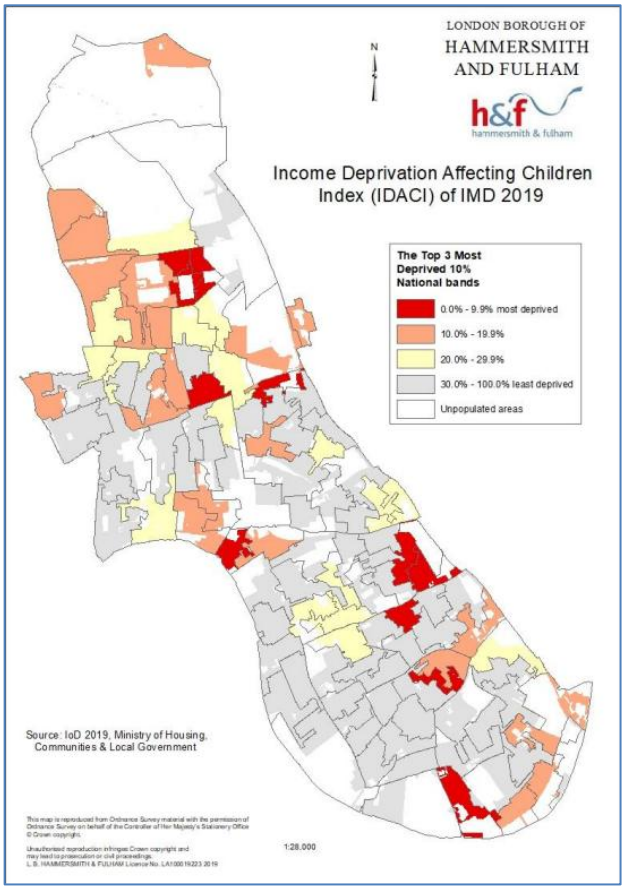
Information on deprivation is available at the council website pages, Deprivation in Hammersmith and Fulham | LBHF

Two of the indices of deprivation we can look at are the index of multiple deprivation and income deprivation affecting children index. The index of multiple deprivation consider seven distinct domains: income: employment; education, skills and training; health deprivation and disability; crime; barriers to housing and services; and living environment. This index combines these seven domains to calculate a single score for each small area in the country. H&F has one of these small areas which is within the 10% most deprived nationally, Clem Atlee. Some 17% of H&Fs small areas or Lower layer Super Output Areas (LSOAs) are ranked in the next band, 10-20% most deprived. These areas are mostly in the north of the borough but also in parts of Hammersmith and north Fulham. H&F has around 18% of its small areas (LSOA) ranked among the most deprived 20% in England.

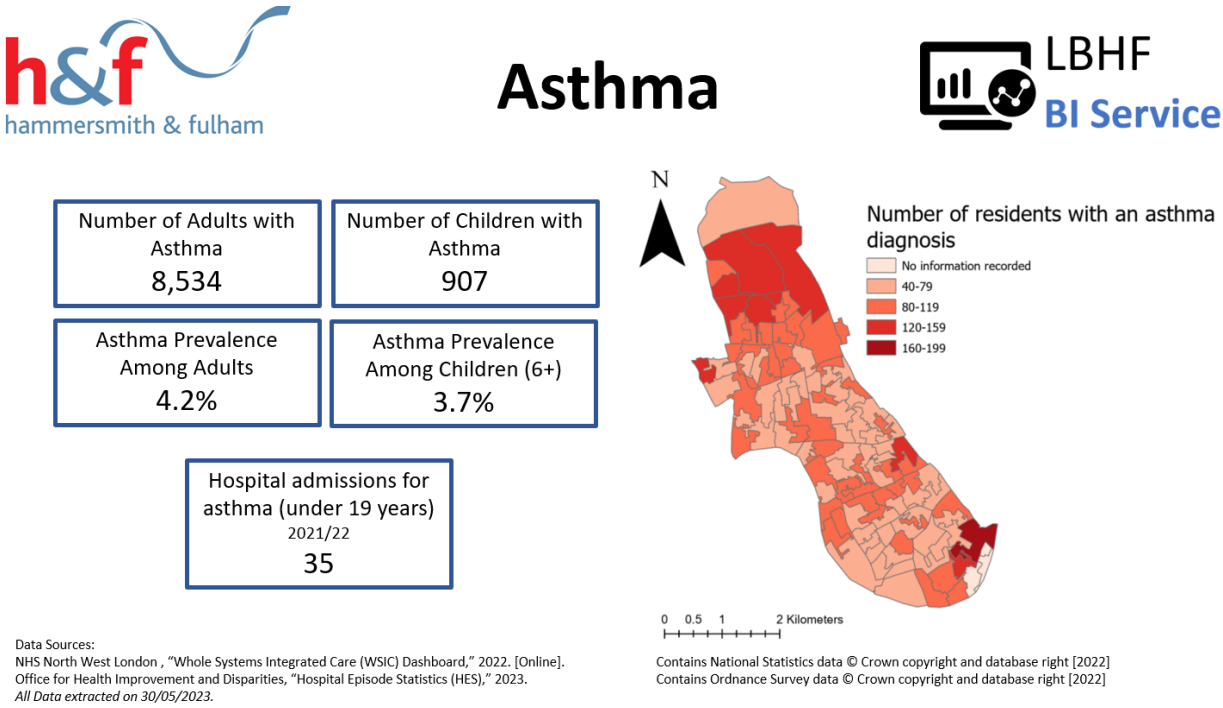
On the average IMD score measure, which reflects the average level of deprivation across all LSOAs (Lower layer Super Output Areas) in an area – Hammersmith and Fulham is the 112th most deprived out of 317 local authority districts in England. This is an improvement since the 2015 IMD which ranked the borough as 91st most deprived on this measure.

When we just consider the income deprivation affecting children index, 11 of the small areas in the borough or LSOAs are in the 10% most deprived nationally (26 LSOAs in 2015). If the small areas of the borough or LSOAs Deprivation are in the three most deprived deprivation levels they are shown in colour, with lower deprivation shown in grey. For income deprivation affecting children, the pattern across the borough is less obvious, with more areas affecting by high deprivation.





Similarly, the pattern of asthma diagnosis across the borough is less clear than the pattern for index of multiple deprivation.



The Royal College of Paediatrics and Child Health in September 2024 published a 'Air Pollution in the UK- position statement' which contained a list of twelve recommendations on six themes including the Right to Clean Air, NHS, Schools, Transport, Housing and Woodburning.[12]

	Theme	Recommendation	For attention of
1	**Right to Clean Air**	• Enact a Clean Air Act to establish a legal right to clean air in all four nations of the UK. • Meet the 2005 WHO Air Quality Guidelines for PM2.5 by 2030 and develop a clear strategy to meet the 2021 WHO Air Quality Guidelines.	UK government and devolved administrations; Secretary of State for Environment, Food and Rural Affairs
2	**NHS**	• The NHS should lead by example by mandating the implementation of the Clean Air Hospital Framework across all NHS organisations.	NHS England, Scotland and Wales; HSC Northern Ireland
3	**Schools**	• Ensure children's health in schools is protected by monitoring outdoor $PM_{2.5}$ and NO_2 levels in all UK schools. Grant local authorities the power to close or divert roads when air pollution near schools exceeds limits.	Department for Education (and equivalent departments in the nations); local authorities

[12] Air pollution in the UK-position statement, Royal College of Paediatrics and Child Health (RCPCH), 2024

		• Implement a national rollout of the school streets initiative, ensuring adequate access for disabled students and those needing to travel by taxi. Improve infrastructure to facilitate active travel to school where school streets are not feasible	
4	**Transport**	• Invest to ensure half of urban journeys in the UK can be walked or cycled by 2030. • Ensure all UK residents have access to regular, affordable and accessible public transport systems. • Implement clean air zones with careful consideration to economically disadvantaged groups and disabled people, and alongside simultaneous improvements in public transport and active travel infrastructure.	Department of Transport (and equivalent departments in the nations); Metro Mayors; local authorities
5	**Housing**	• In England, expand Awaab's Law to include protection for private rented households. In Scotland, Wales and Northern Ireland, introduce and expand Awaab's Law to include protection for private rented households. • Ensure that retrofitting schemes focused on improving insulation include clear minimum ventilation requirements and enforce these.	Ministry of Housing, Communities and Local Government (and equivalent administrations in the nations)
6	**Woodburning**	• Phase out domestic woodburning in urban areas, assist rural residents to transition away from wood as a primary heating source, and support those in fuel poverty with fuel cost assistance. • Increase public awareness on the health harms of woodburning.	Department for Environment, Food & Rural Affairs (and equivalent departments/ administrations in the nations); Metro Mayors; local authorities;

Indoor Air Quality

There is a large body of literature available that documents the adverse impact of ambient air pollution on health and well-being. In contrast, there is relatively little research or data available regarding indoor air pollution and its effects. This is concerning as most people tend to spend around 90% of their time indoors.13 In many instances, air pollution may be worse inside than ambient levels outside.

The World Health Organization estimates that household air pollution was responsible for an estimated 3.2 million deaths per year in 2020, including over 237 000 deaths of children under the age of 5. Their findings show that amongst all the deaths caused by indoor air pollution, 32% were a result of heart disease, 23% were from strokes, and 19% from lung infections.[14]

Indoor Air Pollutants

The sources of indoor air pollution are varied. Many ordinary day-to-day activities such as cleaning and cooking can lead to dirt, dust and gases becoming suspended in the air, negatively impacting the air quality. Some potential sources of indoor air pollution include:

- Cooking at high temperatures
- **Cooking using a gas stove**
- Using air fresheners, candles, incense and deodorants
- **Burning charcoal or wood for heating and cooking**
- Cleaning with specialist cleaning products
- Biological pollutants like tobacco smoke, viruses, bacteria, and mould

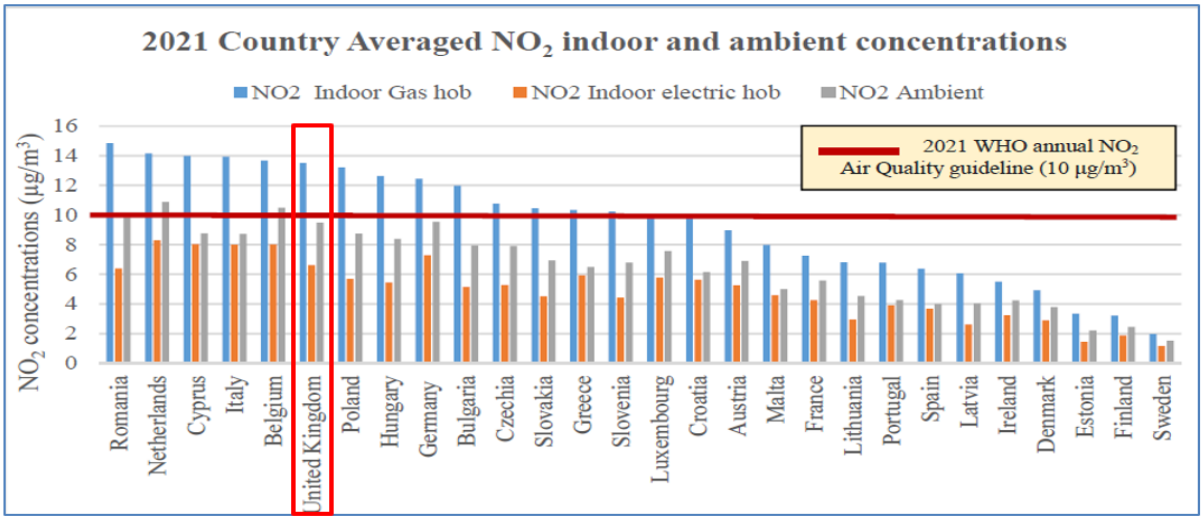
Air pollutants created outside can also enter the home via small gaps around doors and windows and become trapped in rooms that don't have adequate ventilation. Indoor air pollutants will also eventually end up outside, so they also contribute to national emissions.

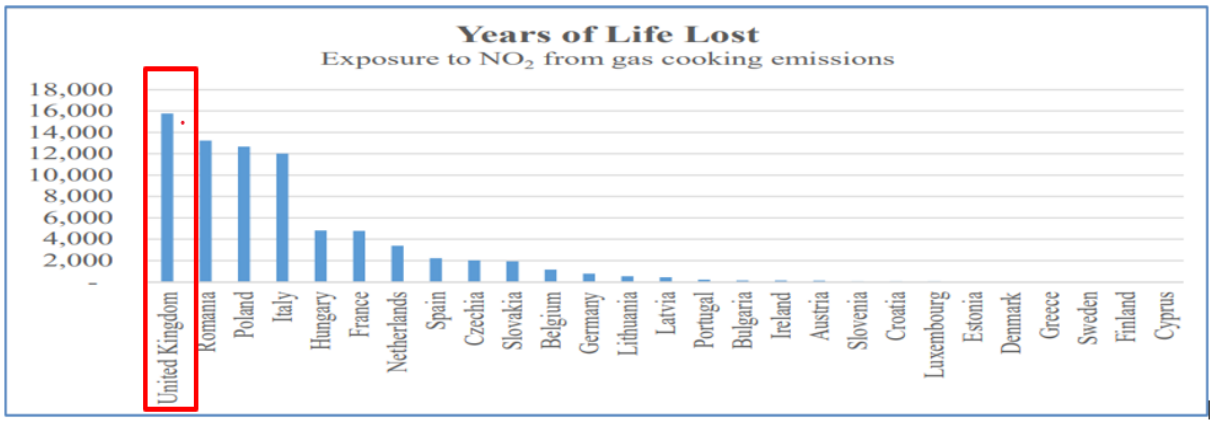
Indoor Air Quality and Gas Cooking

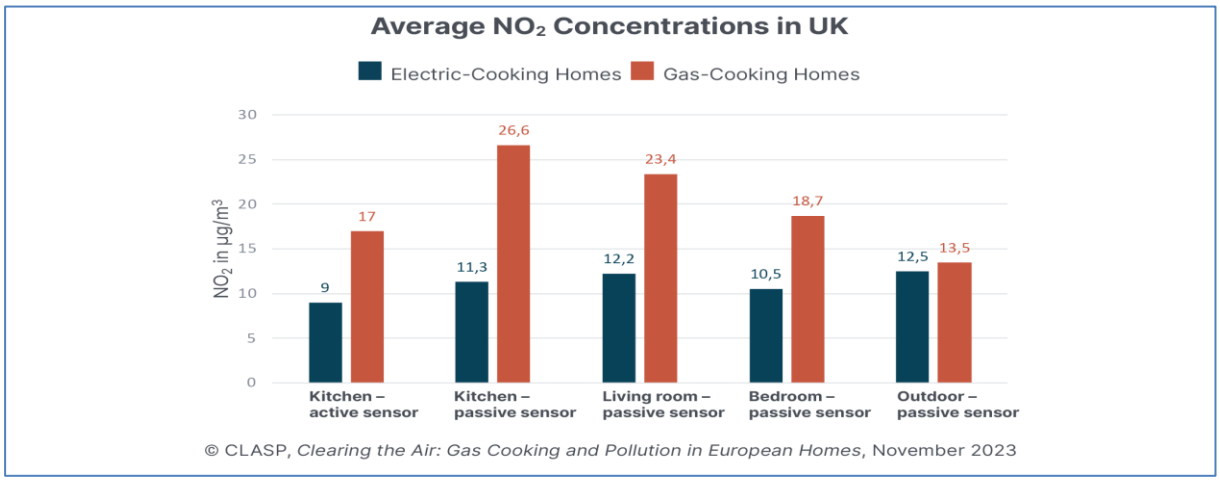
Cooking with gas releases **hazardous air pollutants** into our homes. Over 36 million people in the UK cook with gas appliances. They may be exposed to levels of indoor air pollution that would exceed UK outdoor air quality standards. When in use, gas hobs and ovens emit **carbon monoxide (CO), nitrogen dioxide (NO_2), Benzene and carbon dioxide (CO_2)** which can linger indoors after use.

[13] Neil Klepeis et al., *The National Human Activity Survey (NHAPS): a resource for assessing exposure to environmental elements* (Journal of Exposure Science & Environmental Epidemiology: 2001)
[14] World Health Organisation, *Household Air Pollution* (www.who.int)

Research in 2023[15] and 2024[16] indicates an association between NO_2 exposure above WHO (2021) Air Guideline Value and the development of asthma in children. Exposure to NO_2 from gas cooking appliances produces far more health impacts in the U.K than previously thought, including premature deaths and asthma in the overall population. Gas cooking appliances also leak unburned **methane**, a potent greenhouse gas.





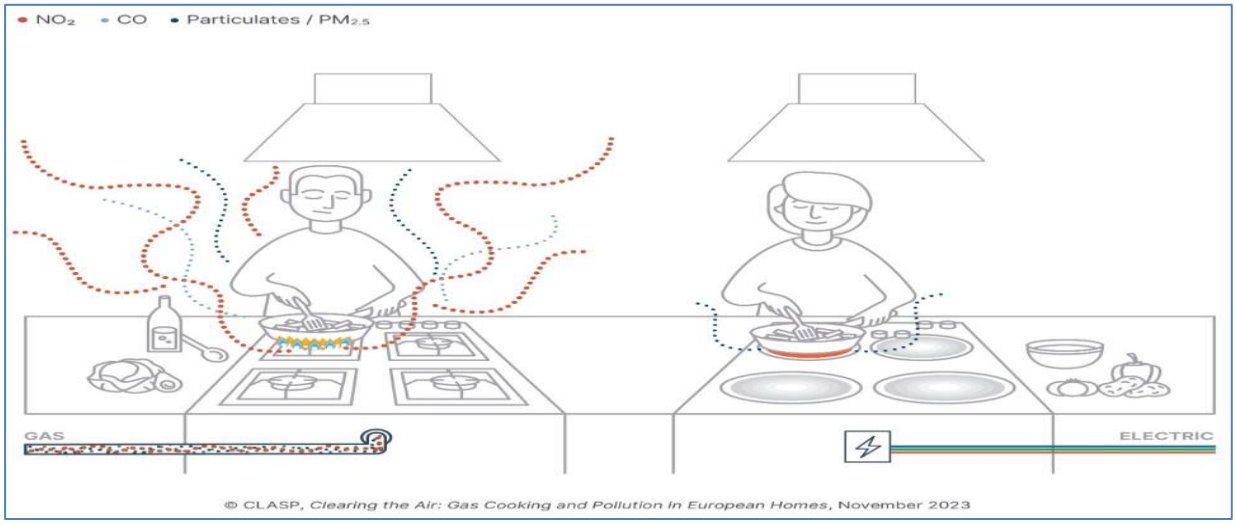


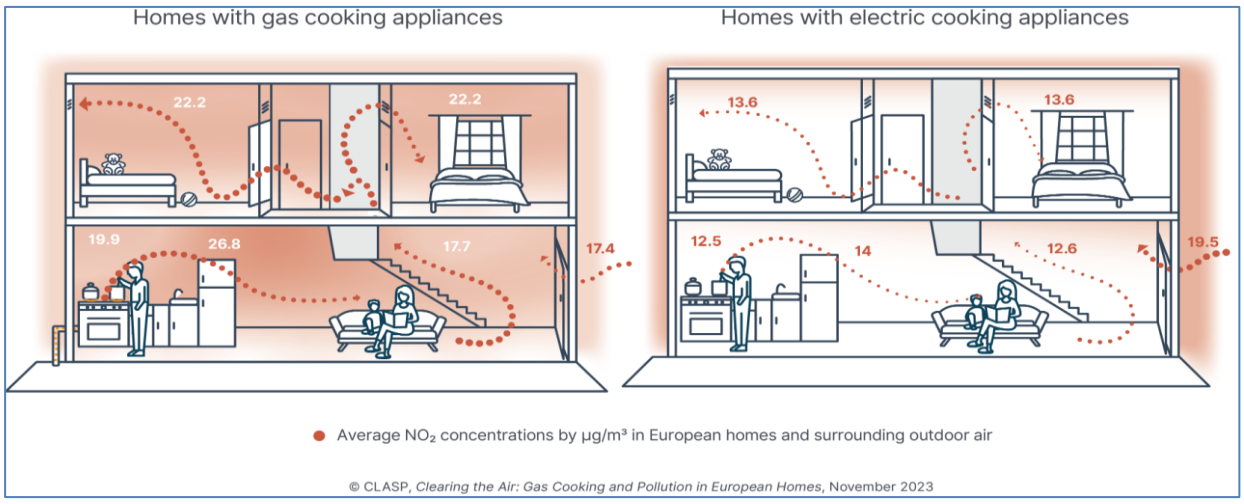
[15] Clearing the Air: Gas Cooking and Pollution in European Homes, CLASP, November 2023.
[16] Assessment of the health impacts and costs associated with indoor nitrogen dioxide exposure related to gas cooking in the European Union and the United Kingdom. Universitat Jaume I, Castellon de la Plana, Spain, 2024

A further study[17] published on the 27th of February 2024 has found that a gas cooking hob can emit more nano-sized particles into the air than diesel and petrol engine vehicles, possibly increasing the risk of developing asthma or other respiratory illnesses. These particles are extraordinarily small. Current Air Quality Regulations deal with PM_{10} and the smaller $PM_{2.5}$.

This would mean that adults and children could be breathing in 10-100 times more nanocluster aerosol from cooking on a gas stove indoors than they would from car exhaust while standing on a street with high vehicle traffic flows such as Westway (A40).

Using a **single gas hob on for 45 minutes raised benzene levels** to above that found in second-hand tobacco smoking, or at the boundary of oil and gas plants, with emissions **10 to 25 times higher** than that from **electric hobs.** A study[18] has found. Benzene produced by gas stoves also migrated throughout homes, in some cases elevating bedroom benzene concentrations above WHO health benchmarks even after the stove was turned off. Induction hobs emit no benzene at all.





[17] Dynamics of nanocluster aerosol in the indoor atmosphere during gas cooking. *PNAS Nexus*, 2024; 3 (2) DOI: 10.1093/pnasnexus/pgae044

[18] Gas and Propane Combustion from Stoves Emits Benzene and Increases Indoor Air Pollution, Environment Science and Technology, Yannai S. Kashtan et al, 2023

Legal Requirements for Indoor Air Quality

There are currently no set legal requirements for monitoring or tackling residential indoor air quality regarding nitrogen oxides, particulate matter, or volatile organic compounds (VOCs). However, as more data emerges about the impact of indoor air pollution public institutions are increasingly concerned about monitoring and addressing this issue. The Department for Environment, Food and Rural Affairs (Defra) published their Clean Air Strategy in 2019 which highlights the need to 'raise awareness about the potential impacts of air pollution at home' and encourages local authorities to take action.

Guidance

Despite the lack of monitoring infrastructure for indoor air quality, in recent years there has been an increase in the level of guidance from public institutions as awareness of the impacts of air pollution indoors grows. In 2019 the Building Research Establishment (BRE) published a report on Ensuring Good Air Quality in Buildings. The report provides a framework for architects, construction firms, and facility managers to improve IAQ along with a summary of relevant guidance and legislation in the UK.

In 2020 the Institute for Health Care Excellence (NICE) published their Indoor Home Air Quality guidance which aims to aims to raise awareness of the importance of good air quality in people's homes and how to achieve this. One of its main recommendations is that Local Authorities place more importance on tackling indoor air pollution in their air quality strategy plans.

In 2021 the Institute of Air Quality Management published a document iaqm_indoorairquality.pdf with the aim of raising awareness amongst professionals about indoor air quality.

In 2022 the Air Quality Expert Group (AQEG) submitted an extensive Indoor Air Quality report to Defra. In it they recommended that the infrastructure for indoor air quality monitoring needs to be significantly improved to match the existing systems that monitor ambient air pollution. The AQEG noted there were numerous obstacles in place to developing these systems, and suggest several measures occupants could take to reduce air pollution in their homes:

- **Increase ventilation** – modern homes are designed to be energy efficient, which often means making them more airtight. Ventilation is important to allow pollutants and moisture (which may lead to mould) to escape. Increase ventilation by adding trickle vents, mechanical ventilation, or by leaving windows open.
- **Limit indoor air pollution sources** – reduce the number of sources producing pollution from inside the home. This includes **candles, incense**, **gas stoves, wood and coal fires,** and spray and **aerosols**. If you are using any of these, make sure you have adequate ventilation to allow pollutants to leave.
- **Air cleaning technologies** – devices like **air filters** can be installed in the home to help remove and reduce the level or airborne pollutants in the home

National and WHO Air Quality Objectives

The national Clean Air Strategy 2019 outlines the high-level strategic framework for improving air quality in the UK and contains national targets and standards for airborne pollutants.

Hammersmith & Fulham currently have six automatic monitoring stations that measure for levels of NO_2, $PM_{2.5}$ and PM_{10}. One station is located near to Shepherds Bush Green (HF4) and Hammersmith Broadway (HF5). Since monitoring at these sites began in 2011 and 2019 respectively, Hammersmith & Fulham have met the majority of the National Air Quality Objectives, including those for NO_2 1-hour means and annual PM_{10} and $PM_{2.5}$. There have however been exceedances of the annual mean for NO_2 and at the Shepherds Bush monitoring station of the PM_{10} 24-hour mean.

Table A Summary of National Air Quality Objectives

Pollutant	Objective	Concentration measured as	Date to be achieved by (and maintained thereafter)
PM_{10}	50 µg/m^3 not to be exceeded more than 35 times a year	24 hour mean	31 December 2004
	40 µg/m^3	annual mean	31 December 2004
$PM_{2.5}$	20 µg/m^3	annual mean	1 January 2020
	10 µg/m^3 not to be exceeded at any relevant monitoring station	annual mean	31 December 2040
	Target of 35% reduction in population exposure compared with the average population exposure baseline period (2016 – 2018)	population exposure reduction	31 December 2040
NO_2	200 µg/m^3 not to be exceeded more than 18 times a year	1 hour mean	31 December 2005
	40 µg/m^3	annual mean	31 December 2005

Table B Summary of WHO Air Quality Guidelines and Interim Targets

Pollutant	Averaging Time	WHO Interim Target (µg/m^3)				WHO AQ Guidelines
		1	2	3	4	
$PM_{2.5}$	*annual*	35	25	15	10	**5***
	24 hour	75	50	37.5	25	15
PM_{10}	*annual*	70	50	30	20	**15***
	24 hour	150	100	75	50	45
NO_2	*annual*	40	30	20	-	**10***
	24 hour	120	50	-	-	25

***Council Air Quality Targets** to be achieved by **2030**