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CHELTENHAM
BOROUGH COUNCIL

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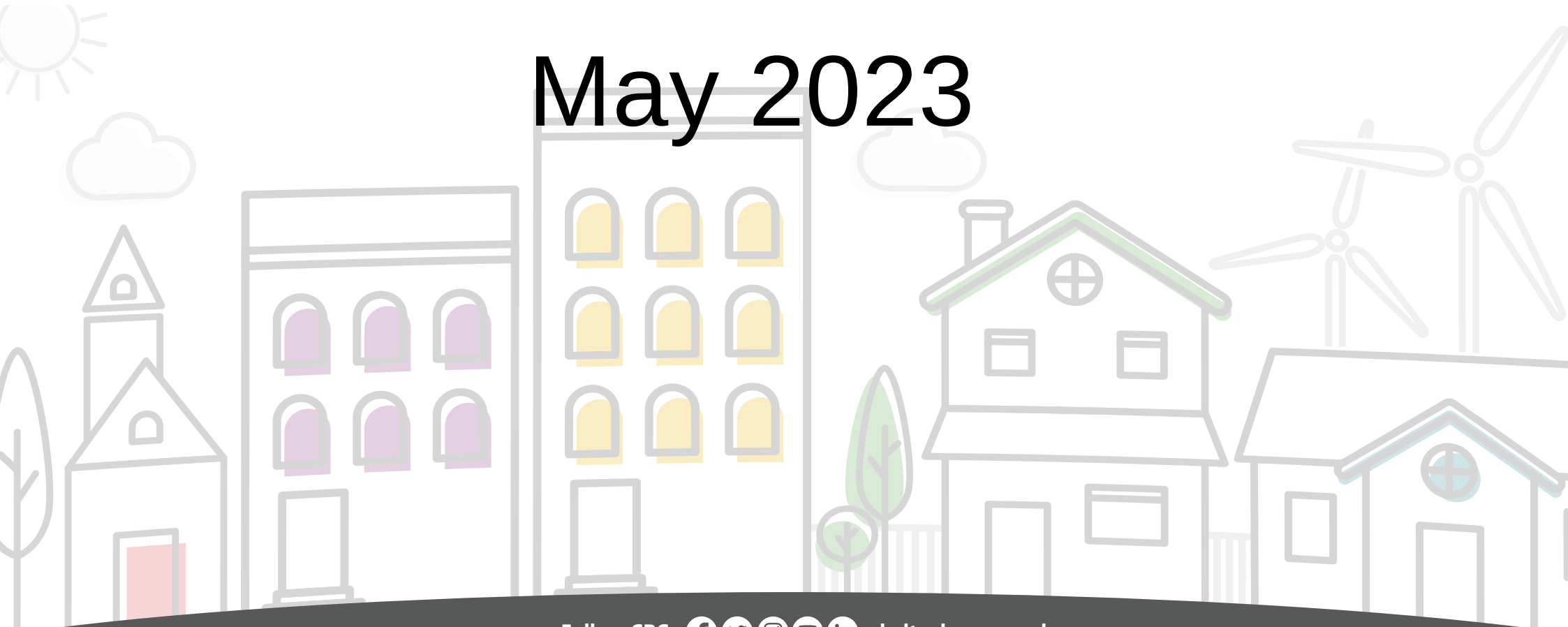
Air Quality Action Plan

May 2023



Foreword

Air quality is something that we can't see. That can make it seem a bit removed from our day-to-day lives, but it impacts all of us, and particularly the most vulnerable. Scientists tell us that there is simply no safe level of pollution. We have a duty to do everything we can to protect people. That means organisations like councils and health authorities taking a lead, but also individuals being willing to do their bit too.

Ella Adoo-Kissi-Debrah, who lived near the South Circular Road in Lewisham, south-east London, died in 2013. An inquest had found air pollution "made a material contribution" to her death. For the most part, Cheltenham's air quality is good and the levels of pollution we experience are nowhere near those that led to Ella's death. But that individual tragedy offers a salutary warning that must take this issue seriously.

Cheltenham Borough Council is responsible for reviewing the quality and the likely future quality of the air within its district and to declare an Air Quality Management Area (AQMA) where pollutant levels do not meet the prescribed air quality objectives. We have declared one such area and you can read more about that in the technical part of our report. However, that does not mean we are cutting back on our actions to tackle local air pollution in the rest of the town. On the contrary, this plan tackles air quality throughout the borough.

Vehicles are the major source of air pollution so this work will inevitably only be successful if we work together with Gloucestershire County Council, (GCC) communities and other partners, which is why we are pleased to be working with Gloucestershire County Council as the transport authority. The Borough Council's vision for sustainable travel is detailed in the Connecting Cheltenham report. This includes pedestrian friendly streets, a network of cycle paths, improvements to bus routes and much more besides. The county council has considered this as part of its Local Transport Plan and it will take the work further in its detailed Local Cycling and Walking Infrastructure Plan.

The link between this area of policy and health is clear. That's why we were are pleased to be working as partners in the One Gloucestershire Integrated Care System to improve the lives of people who live and work in the area. The Environment Act 2021 strengthens local powers in relation to air quality and ensures that the responsibility for action is shared across government organisations.

We won't solve this problem with one single action, but there is one way we can all make a contribution: by driving fewer miles. People who walk or cycle are also much less likely to suffer from a whole host of other health conditions so that should be enough motivation for all of us to make a small change in our lives, but a big difference to the quality of our air. And businesses, schools and other public bodies employers can play their part by encouraging their employees, students, suppliers and partners too.

Working together, as communities, as organisations and as individuals, we can all do our bit to make the air in Cheltenham cleaner and safer for everyone.

Councillor Martin Horwood
Lead Member for Customer
and Regulatory Services

Contents

Introduction

This plan aims:

1. **To detail the actions we will take to address air quality issues within the Borough**

2. **To summarise the actions we will take to reduce levels of Nitrogen dioxide (NO_2) within our declared Air Quality Management Area (AQMA) as required under the Environment Act 1995 (as amended).**

Introduction:

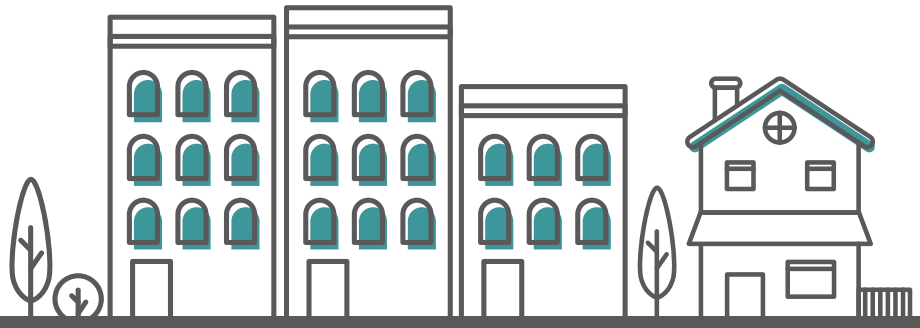
As a local authority, we have a duty to review and assess local air quality within our area against a set of health-based objectives for a number of specific air pollutants. If any area is identified where pollutants exceed the objectives, then we are required to declare an Air Quality Management Area (AQMA) and to prepare an Air Quality Action Plan (AQAP) setting out the measures we intend to introduce in order to reduce concentrations of air pollutants and achieve the air quality objectives.

In addition to these formal obligations for Local Air Quality Management, we are encouraged by the Department for Environment, Food and Rural Affairs (Defra) to implement wider plans and policies to support the achievement of the air quality objectives and to ensure air quality is considered within a wide range of frameworks. This was already our commitment in Cheltenham too so this action plan includes a range of actions across the whole borough.

The specific action plan relating to the AQMA must conform to format standards prescribed from Defra and the entire plan is at Appendix 1. It includes a technical and detailed modelling assessment prepared in conjunction with consultant experts Bureau Veritas. The report was compiled with the involvement report was compiled with the involvement of lead Cabinet Members, Clean Air Cheltenham, Cheltenham Borough Council licensing, parking, strategic transport, economic development, fleet management and climate change teams and Gloucestershire County Council. The Director of Public Health and the Head of Public Protection at Cheltenham Borough Council approved the plan and it was subject to the required consultation process. It outlines the action we will take to improve air quality in Cheltenham from now until 2027.The detailed modelling assessment focusses on the road network across Cheltenham to establish any changes in the spatial extent of NO_2 concentrations in order to identify any areas that are above or within 10% of the air quality annual mean objective. This plan will be submitted to Defra for their appraisal.

Legal Background

At international level, emission-ceiling levels are set for various pollutants. This aims to control long-range transboundary pollution. Implementation at EU level is through various Directives and in the UK by various regulations including the National Emissions Ceiling Regulations 2018. There is also legislation relating to the air which immediately surrounds us. The Air Quality Standards Regulations 2010 as amended set out the air quality objectives. The World Health Organisation (WHO) also publish air quality guidelines on threshold limits. These are guidelines only. The UK government has a statutory monitoring network in place through Local Authorities so that it can meet the requirements of the above regulations with air quality modelling to supplement the monitored data. We are required through local air quality management systems, and the Environment Act, to assess the air quality within our District. Where an exceedance of the air quality objective is recorded or is likely to be recorded, we are required to declare an AQMA. This ensures our resources are targeted and focussed on reducing the pollutant of concern. Schedule 11 of the Environment Act 2021 strengthened these requirements. There are over 500 such management areas throughout England, mainly to address the contribution of NO_2 air pollution from traffic emissions. The air quality objectives for England are shown to the right.



Pollutant	Air Quality Objective: Concentration	Air Quality Objective: Measured as
Nitrogen Dioxide (NO_2)	200µg/m³ not to be exceeded more than 18 times a year	1-hour mean
Nitrogen Dioxide (NO_2)	40µg/m³	Annual mean
Particulate Matter (PM_{10})	50µg/m³, not to be exceeded more than 35 times a year	24-hour mean
Particulate Matter (PM_{10})	40µg/m³	Annual mean
Sulphur Dioxide (SO_2)	350µg/m³, not to be exceeded more than 24 times a year	1-hour mean
Sulphur Dioxide (SO_2)	125µg/m³, not to be exceeded more than 3 times a year	24-hour mean
Sulphur Dioxide (SO_2)	266µg/m³, not to be exceeded more than 35 times a year	15-minute mean

More information on the legal context and objectives can be found in the detailed modelling study at Appendix 1

Particulate matter is made up of a number of chemicals and materials some of which are toxic. Due to their size, they can enter the blood stream and travel around the body, lodging in the brain heart and other organs. There is growing concern around particulate matter $PM_{2.5}$.[1]

The Environment Act 2021 required the Government to set new air quality targets for $PM_{2.5}$. The Environmental Targets (Fine Particulate Matter) (England) Regulations 2023 have now been introduced which require an annual maximum mean concentration equal or less than 10µg/m3 to be met across England by 2040. The Regulations include details on how levels will be monitored and assessed. A target metric for reduction in population exposure has also been set recognising the adverse health effects even in areas which are within the limit value[2].

1 if it passes through a size-selective inlet with a 50% efficiency cut-off at 2.5 micrometres aerodynamic diameter.

2 Air Quality Expert Group - PM Target setting

Summary of Air Quality in Cheltenham:

We have an extensive regime of air quality monitoring in Cheltenham. Environmental Health Officers (EHOs) within the Environmental Health Team at Cheltenham Borough Council monitor air quality using a network of 46 NO_2 diffusion tube sites across the Borough including one site with triplicate diffusion tubes co-located with a continuous automatic monitor. Exceedance of the NO_2 air quality objective in 2020 resulted in the declaration of an AQMA covering the area from the junction of Gloucester Road, Tewkesbury Road and High Street, through Poole Way along Swindon Road to the junction of St Georges Street. In addition to passive diffusion monitoring, nine AQ Mesh pods around the Borough monitor particulate matter as $PM_{2.5}$ and PM_{10}. We experienced technical issues with the units which have now largely been resolved and full data from this equipment will be published shortly. Detailed modelling assessments completed in 2021 predicted PM concentrations within the AQMA to be below the current annual objectives. In September 2022, Defra confirmed that our monitoring calculations were accurate for all sources and pollutants. We installed 2 Defra approved BAM beta attenuation mass monitors along the A40 at Benhall in November 2022. These monitor $PM_{2.5}$ and PM_{10} and enable us to calibrate our existing AQmesh pod monitors. Provisional data is shown below*:

A 40 Gloucester Road Benhall PM (Monthly Averages)

	Nov 2022	Dec 2022	Jan 2023	Feb 2023
PM_{10} (µg/m³)	20	20	19	25
$PM_{2.5}$ (µg/m³)	9	16	12	14

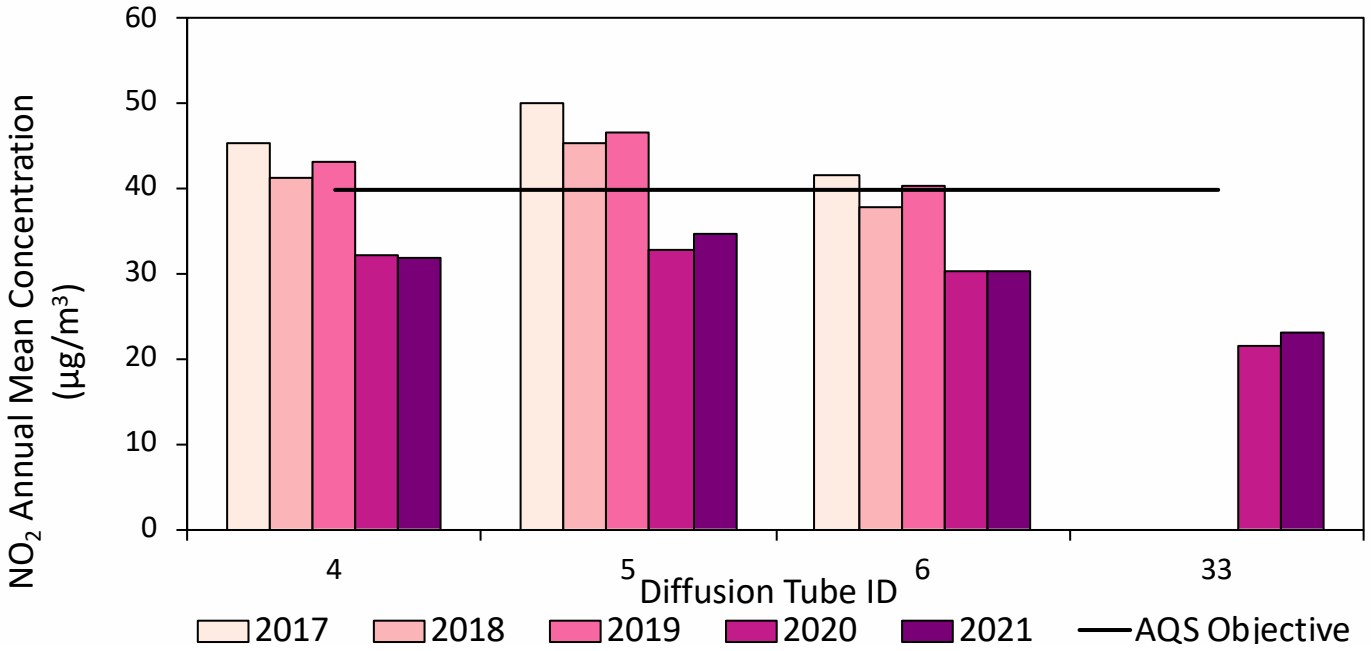
*we continue to work with our data consultants to ensure accurate and reliable results are published for PM monitoring in conjunction with modelled data and seasonal adjustments.

These initial results appear to be within current objectives but following the introduction of the new targets, we await further guidance from Defra on the new national approach to $PM_{2.5}$ monitoring and its integration into the local air quality management framework. More detailed information on our current monitoring is provided in the detailed modelling at Appendix 1.

Our annual status report was approved by Defra in September 2022 and affirmed that our monitoring data for diffusion tubes was applied correctly and accurately for our 2021 data and all sources and pollutants were correctly assessed. Defra concluded at that time that Cheltenham Borough Council was committed to maintaining good air quality. See our Annual Status Report 2022. Our Annual Status report for 2023 will be available in Autumn 2023.

Road traffic emissions are the main source of NO_2 in Cheltenham, mainly from the A40 (Gloucester Road), A4013 (Princess Elizabeth Way), A4019 (Swindon Road/Tewkesbury Road), A435 (London Road), A46 (High Street), and A46 (Bath Road). These roads, among others, form the main arterial highway network within Cheltenham and carry high volumes of road traffic. As a result, these roads tend to become congested, in particular through Cheltenham town centre, resulting in increased concentrations of NO_2. Outside of the AQMA, the annual mean limit of 40 µg/m³ has not been exceeded in the last five years, suggesting that there is no need to amend the current AQMA boundary. During 2021, the annual mean NO_2 concentration was not greater than 60 µg/m³ at any diffusion tube site and, therefore, an exceedance of the 1-hour mean objective at any location with the borough is considered unlikely. The automatic monitoring station did not record any hourly concentrations above 200 µg/m³ during 2021. Our monitoring data for 2022 shows no exceedance of the annual mean objective for NO_2.of 40µg/m³. The highest levels were recorded within the AQMA of 38.34µg/m³ and 35.48µg/m³. Data for 2022 will be reported within our Annual Status Report to DEFRA. The annual trend of NO_2 levels to 2021 within the AQMA is shown below:

Annual trends of NO_2 levels within the AQMA



An action plan for the borough

Action 1

Review and develop the air quality action plan for the borough

Planning Phase/Target date: ongoing

In order to meet our legal obligations and key priority within our corporate plan, a regular review of our policies and plans will ensure we continually improve the service to tackle poor air quality generally and at any local hotspots. We address air quality management in other strategies such as our Pathway to Net Zero to ensure we deliver services in an integrated manner. We have a duty to keep our AQAP up to date and any revision to it will be subject to a consultation process. The Environment Act 2021 strengthens the Local Air Quality Management framework by placing greater emphasis on Air Quality Action Plans (AQAPs) setting out how air quality standards and objectives are to be achieved.

Action 2

Aspire to reduce the levels of NO2 below the national target objective

Planning Phase/Target date: 2023

All combustion processes in air produce oxides of nitrogen (NO_X). Nitrogen dioxide (NO_2) and Nitric Oxide (NO) are referred to as NO_X. Emissions from road transport is the main source and is the main reason for the declaration of AQMAs. The law sets a minimum objective of 40 µg /m³ in a calendar year and a one-hour level of 200µg/m³ not to be exceeded more than 18 times in a calendar year. As an Authority, we aspire to do more. We recognise that the World Health Organisation (WHO) global air quality guidelines recommend a much lower incremental target reduction to 10µg/m³. Reports suggest that since 1970 the emissions of nitrogen oxides have reduced by 69% and fell by a further 19% between 2010 and 2015[3]. There is no safe level of NO_2 below which there are no adverse health effects and so any reduction below the set air quality standards will bring additional health benefits. The road to net zero sets out the approach to reduce exhaust emissions from road transport. This is extremely important given that the AQMA is declared due to increased NO_2 levels heavily influenced by transport emissions. Our current exceedance is limited to a very small area and our action plans must reflect this. As a key partner we continue to engage with Gloucestershire County Council on the Local Transport Plan which sets out the long term strategic transport vision for the county to 2041. This will require significant resources and commitments from Cheltenham Borough Council and its partners to deliver the identified actions.

Cheltenham Borough Council Air Quality Management Area

Air quality monitoring within the AQMA

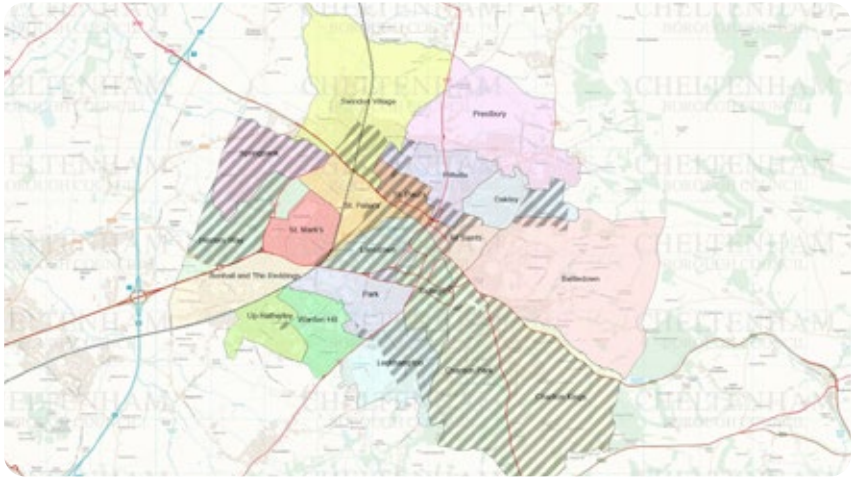
3 Defra UK Plan

Action 3

Reviewing the borough's Smoke Control Areas

Planning Phase/Target date: 2023

Statistics show that domestic burning from wood burners and coal fires is the single largest contributor to the emission of particulate matter. Recent legislation will ensure the most polluting fuels are phased out. As a Local Authority under the Clean Air Acts, we can designate smoke control areas. This is an area where individuals and businesses must not emit a substantial amount of smoke from chimneys and they must not buy or sell unauthorized fuel unless it is to be used in an appliance approved for use in a smoke control area. Currently approximately half of the Borough has been designated a smoke control area by way of over 20 separate orders. A map of the areas can be viewed here.



Cheltenham Borough Council Smoke Control Areas

We will review the current smoke control orders and explore the viability of declaring the whole Borough a smoke control area. Any such declaration would only be made following the statutory consultation process required by the Clean Air Act.

Action 4

Deliver a Schools Air Quality Project

Planning Phase/Target date: 2023

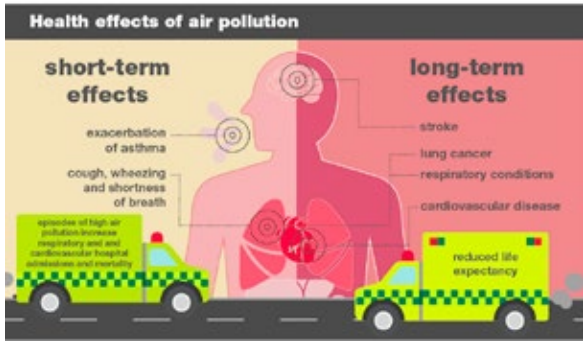
We will develop and deliver an educational awareness initiative within schools with strategic direction from The Director of Public Health. This will highlight the issues of local air pollution and measures that parents, carers, pupils and others can take to reduce their emissions.

Action 5

Implement education and awareness campaigns

Planning Phase/Target date: 2023

We will work with the Director of Public Health and our One Gloucestershire Integrated Care system partners at a strategic level to support campaigns using a behavioural science approach. We will work with key target groups to understand what would enable them to change behaviour. We will aim to raise awareness of the health effects of exposure to poor air quality including the implications for Covid 19, lung disease and development, coronary heart disease, stroke, cancer, exacerbation of asthma and increased mortality[4]. We will use thematic data more effectively to inform and prioritise our actions[5].



4 CMO Report on air quality

5 Air Quality Briefing for Directors of Public Health

Action 6

Adopt powers to enforce the 'stationary idling offence' for vehicles

Planning Phase/Target date: 2023

Motorists who leave vehicle engines running while stationary cause unnecessary emissions of harmful pollutants. This affects health and contributes to climate change. As a Local Authority we will adopt legislation and give powers to Officers under the Road Traffic (Vehicle Emissions) (Fixed Penalty) (England) Regulations 2002. This would require motorists to switch off their engine when asked to do so by an authorised officer. A proportionate approach to enforcement will be employed to bring about positive behaviour change. Enforcement will be a last resort following appropriate education and information campaigns. Where motorists are uncooperative and fail to comply, they could face a fixed penalty notice. Idling at school gates will be included within the schools air quality project.

Action 7

Ensure that the planning and design of the Golden Valley Development sets a standard for high air quality in an urban development

Planning Phase/Target date: 2023

The Joint Core Strategy (JCS) adopted by Gloucester, Tewkesbury and Cheltenham sets out the strategic framework for the area including the broad expectations for the Golden Valley Development. The adopted supplementary Planning Document (SPD) builds on the JCS to set a more focused vision, masterplan and set of objectives for the development. The masterplan will provide an extensive network of streets and tracks to encourage active and sustainable travel choices and green infrastructure. The master plan will deliver mobility hubs to facilitate modal shifts between public transport, bicycles and other forms of micro mobility. It will consider off site effects from traffic accessing and egressing the site to ensure air quality objectives are met.

Action 8

Support Gloucestershire County Council's delivery of an expanded Arle Court transport hub

Planning Phase/Target date: 2023

We support the planned improvements to the transport hub by Gloucestershire County Council to provide sustainable transport and high quality alternatives to car use.

Action 9

Encourage investment by all landowners and authorities in rapid charging points for electric vehicles

Planning Phase/Target date: 2023

Monitoring and data modelling have shown that cars and large goods vehicles (LGV) are the main source of NOx pollution within Cheltenham. Full electric vehicles (EV) have zero exhaust emissions, however they still have non exhaust emissions including particulate matter thorough tyre and brake wear. This reinforces the importance of the measures supporting a modal shift away from private car use.

Reliable and easily accessible charge points within the Borough are the key to making the switch as easy as possible. We will be engaging with the County Council for the on street residential charge point scheme recognising the challenges faced by those living in flats, terraced properties and those without home charge points . GCC have appointed an EV charging operator to progress on street EV charging points across Cheltenham. Cheltenham Borough Council are undertaking a strategic car parking review looking at how car parks can better serve individuals as well as deliver wider economic, environmental and social outputs including improving air quality. We are engaging with EV operators on a range of suitable locations and investigating the most appropriate routes to delivery.

Action 10

Adopt a policy for licensed taxis and private hire vehicles that immediately removes the most polluting vehicles and achieves a net zero emissions fleet by 2030

Planning Phase/Target date: 2023

Taxis and private hire vehicles are an essential form of transport in Cheltenham, with licensed taxis and private hire vehicles, undertaking thousands of journeys around the borough annually. Our air quality management regime has identified that vehicle exhaust emissions are the principle source of pollution, with particulate matter (PM) forming an increasingly important contributor to air pollution and poor air quality.

A revised emissions policy for licensed private hire vehicles and taxis was adopted in 2022 setting a clear path to achieving a carbon neutral licensed fleet by 2030. The policy seeks to take a staged approach whereby the most polluting vehicles are phased out as a matter of priority. The remaining licensed vehicles with better emission standards will gradually be phased out, thereby meeting the 2030 carbon neutral commitment.

Action 11

Support Gloucestershire County Council as the local highways authority to deliver modal shift away from private cars to public transport with improvement in Cheltenham's walking and cycling routes.

Planning Phase/Target date: 2023

We recognise and support the critical role of the county council as Highway Authority and their role in traffic management and transport. They are fundamental in ensuring air quality objectives are met and integrating prevention measures with the Local Transport Plan. There has been considerable progress over the last 2 years with the West Cheltenham route.

The shift to low and ultra-low vehicle emissions is well under way as we move to 2030 at which point the Government will end the sale of all new conventional petrol and diesel cars and vans. This shift will resolve the main cause of poor air quality but it may not happen soon enough. A Clean Air Zone to reduce pollution from vehicular NO_2 and particulate matter could be considered by the county council. Due to the potential impact on individuals and businesses, this would be where no other options are viable and only if it can be demonstrated that it meets the expected outcomes as detailed in the Clean Air Framework Further monitoring and evidence gathering will be needed. We will support the work of GCC as the Highway Authority in initiatives such as adoption of 'Twenty is Plenty' where possible, apply variable parking charges to incentivise use of EVs and hybrids, and support a move to a mass rapid transit system.

Action 12

Support sectors containing more polluting vehicles to switch to cleaner vehicles

Planning Phase/Target date: 2023

We will continue to build on our current progress of implementing alternative fuel sources within the Council and its partner organisations. The Ubico and Council fleet replacement plan was recently adopted which included amongst other things a move away from petrol and B7 diesel based fuel to electric and certified palm oil free hydrogenated vegetable oil (HVO). This will have a direct effect on the emissions of NOx and PM. We are also supporting Gloucestershire County Council with their 'last mile delivery' project aiming to reduce the amount of delivery vehicles entering the town centre.

Action 13

Expand monitoring for PM_{10} and $PM_{2.5}$

Planning Phase/Target date: 2023

Particulate matter (PM) is a generic term to describe a complex mixture of solid and liquid particles of varying size, shape and composition. They are classed as coarse PM_{10} (less than 10µm in diameter), fine $PM_{2.5}$ (less than 2.5µm in diameter) and ultra-fine PM (less than 0.1µm in diameter). It includes natural sources such as pollen and manmade sources such as dust from exhausts, brakes and tyres. Particles less than 10 µm pose the greater risk as they can be deposited deep within the lungs. PM's can travel large distances thus originating from non-UK sources. The UK has made binding commitments to further reduce emissions. The limitations of compliance assessment based solely on monitoring are well known. High quality monitors are costly to maintain and no matter how many sites are instrumented, it is inevitable that the vast majority of the population will still live in locations where air quality is not directly measured. This creates the long-standing requirement for monitoring to be made representative of regions and the population as whole. Monitoring for PMs is complex. We have recently installed 2 Defra approved Beta attenuation mass monitors to monitor PM_{10}, and $PM_{2.5}$. They are also used to calibrate our 9 AQmesh pods which monitor PMs thus giving accurate reliable results on which to report and inform decision making. More detailed information can be found in our Annual Status Report. We continue to work with Defra and will respond to new guidance on the national approach to $PM_{2.5}$ monitoring and its integration into the local air quality management framework. We continue to work closely with our data consultants to ensure accurate and meaningful results are published in light of the above.

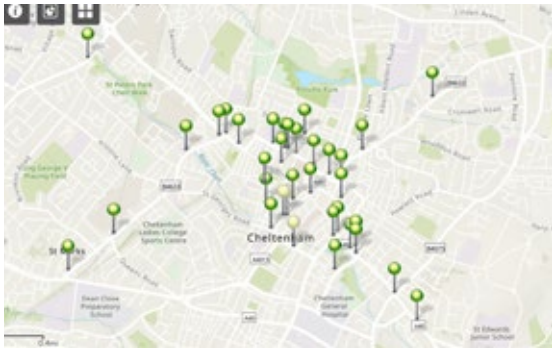
New air quality monitoring equipment

Action 14

Maintain and review air quality monitoring locations around the borough.

Planning Phase/Target date: 2023

Cheltenham Borough Council's air monitoring regime currently consists of 46 NOx diffusion tubes (passive monitoring) including the triplicate co located station. We have 9 mesh pods, 1 automated continuous and 2 Defra approved beta attenuation mass monitors. The mesh pods monitor real time localised NOx, PM_{10} and $PM_{2.5}$. Although they are not accredited devices, such data is a useful indicator as to pollutant concentrations within the Borough. The continuous monitor is MCERTS approved mirroring compliance with EN 14211:2012 and measures NOx, NO_2 and NO. All the above require ongoing maintenance, calibration, data analysis and rental costs. CBC reviews its monitoring regime each year, responding to the data and to any legislative changes and requirements from Defra. Our monitoring provides an extensive picture to assist with planning requirements. Monitoring locations are determined by modelling reports. A full list of monitoring and locations can be found on our interactive website monitoring sites and within our Annual Status Report Monitoring of NOx within the AQMA and across the district will continue and results from our PM monitoring will be included within our next status report to DEFRA.



NOx Monitoring stations

Action 15

Adopt an air quality supplementary planning document

Planning Phase/Target date: 2023

Our Joint Core Strategy (JCS) and our Cheltenham plan recognise the importance of the protection and enhancement of our natural environment. Cheltenham Borough Council expects all developers to manage the air quality impact of all proposed developments and an air quality supplementary planning document will support these existing plans. It will give clear requirements to developers to assess the effects of air quality on the proposed development. It will detail the type and scale of developments which will require an air quality impact assessment and what the assessment must include. It will ensure transparent and consistent advice for developers where air quality needs to be addressed.

Action 16

Produce a biodiversity supplementary planning document

Planning Phase/Target date: 2023

Our Joint Core Strategy (JCS) and our Cheltenham plan recognise the importance of the protection and enhancement of our natural environment. Cheltenham Borough Council expects all developers to manage the environmental impact of all proposed developments. A biodiversity supplementary planning document will support these existing plans by providing guidance to developers on what they must do to protect and enhance our natural environment throughout the full development cycle. We will reflect the role that trees, vegetation, nature corridors and ecosystems play in removing air pollution and improving air quality. It will detail the type and scale of development which will require an environmental impact assessment (EIA) and what the environmental impact assessment must include. It will ensure transparent and consistent advice where effects on the environment need to be addressed.

We will manage and maintain our trees as public assets using the CAVAT method.

Cheltenham Air Quality Management Area (AQMA)

The revised Cheltenham Borough Council AQMA was declared in 2020, covering an area extending from the junction of Gloucester Road, Tewkesbury Road and High Street, through Poole Way and along Swindon Road to the junction of St George's Street. The approximate population of the AQMA is 76 people, based on the total area of the AQMA being ~0.03km² and the population density of Cheltenham being 2,550 per km² [6] The previous air quality action plan (AQAP) completed by Cheltenham Borough Council in April 2014 was developed for the previous borough-wide AQMA, which has now been revoked. The current Air Quality Action Plan (AQAP) has been produced as part of our statutory duties required by the Local Air Quality Management framework. It outlines the action we are or will take to improve air quality in the Borough to 2027.

6 https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/datasets/populationandhouseholdestimatesenglandandwalescensus2021

Summary Action Plan for the AQMA

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQM	Progress to Date	Estimated Completion Date	Comments
Measures specific to AQMA											
1	Engage with Royal Mail to move toward low emissions fleet	Promoting Low Emission Transport	Company Vehicle Procurement -Prioritising uptake of low emission vehicles	CBC / GCC / Royal Mail	Ongoing		Reduced NO_2 within AQMA at monitoring site closest to Royal mail Delivery Office	Should data be made available following discussions, a study is to be completed to assess effect of cleaner LGVs			Initial meeting has taken place, further engagement is planned.
2	Improve data around AQMA (and beyond): A) Commission a study to understand purpose of car trips (including start/end points) through AQMA B) Single person or multiple occupancy survey C) How car parking generates trips through the AQMA	Transport Planning and Infrastructure	UTC, Congestion management, traffic reduction	CBC	2022	2023	Completion of traffic studies and surveys to deliver further targeted AQAP measures	To be confirmed once exercise is completed.	n/a	2023	Work with GCC Highways department. Engage consultants if required.
3	Implement Junction improvements/traffic light changes in vicinity of AQMA	Public Information	Other	GCC	2022	2023	Study ongoing by GCC	Study ongoing by GCC	n/a		Area where the traffic lights has been replaced with new equipment are not in the AQMA area. GCC have fully refurbished the signals at North Place / Portland Street, and will be trialling new Air Quality sensors at this location and other along the A4019 area in Cheltenham (Brewery area).
4	Public Health Awareness Campaigns as part of 'Air Quality Communication Strategy' around exceedances in AQMA	Public Information	Other	CBC / GCC	2022	2023	Suite of campaigns to promote active travel and uptake in Electric Vehicles specifically within AQMA.	Measure is more an awareness raising tool; however it is also a useful measure to help members of public understand the importance of mitigation for air quality	n/a	2026	Work with Gloucestershire County Council 'behavioural experts' and marketing team to increase awareness around individual actions that can be taken to reduce pollution. Use diverse media for delivering messages but target messaging within AQMA
5	Engage with local NHS Trust to raise awareness of the effects of exposure to poor air quality where limits are exceeded.	Public Information	Other	CBC / Local NHS Trust	2022	2023	Target most vulnerable groups including elderly, children and disabled people, using NHS facility io border of AQMA	Measure to increase public awareness	n/a		Large NHS Premises on boundary of site – ideal focus for initiatives. Needs discussion with NHS
6	Investigate delivery consolidation opportunities including Golden Valley Development to reduce deliveries through AQMA.	Transport Planning and Infrastructure	UTC, Congestion management, traffic reduction	CBC	2022	2023	Completion of traffic studies and surveys to deliver further targeted AQAP measures	To be confirmed once exercise is completed.	n/a	2023	Work with CBC Climate Team, Golden Valley Development team. Engage consultants if required

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQM	Progress to Date	Estimated Completion Date	Comments
7	Develop partnership for last mile delivery in town centre, by sustainable transport.	Transport Planning and Infrastructure	Freight Partnerships for city centre deliveries	CBC	2022	2023	Development of consolidated delivery services	To be confirmed once exercise is completed.	n/a	2025	Already under consideration with GCC / A commercial partner. Combine with Carbon Neutral Plan
8	Offer more EV charging points in the streets surrounding the AQMA	Promoting Low Emission Transport	Other	CBC / GCC	2022	2025	Additional EV charging points installed at West End Car Park adjacent to the AQMA and surrounding streets.	Small impact upon NO_2 concentrations from measure individually, estimated to be less than 1µg/m³ based upon a low to medium uptake.	n/a		Streets – GCC Car Parks - CBC
9	Extend the existing priority parking areas for Electric Vehicles within parking areas of AQMA	Promoting Low Emission Transport	Priority parking for LEV's	CBC	2022	2026	Review and update discounts for residents parking permits for Electric Vehicles in and around the AQMA	Small impact upon NO_2 concentrations from measure individually, estimated to be less than 1µg/m³ based upon a low to medium uptake.	n/a		The Borough and County Councils continue to encourage electric vehicle use through the installation of charging points in car parks or on-street. The Borough currently provide free EV charging at its car park charging points.
10	Install Rapid Charging Points for Electric Vehicles	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging	GCC	Ongoing		No. of charging points installed	Small impact upon NO_2 concentrations from measure individually, estimated to be less than 1µg/m³ based upon a low to medium uptake.			Fast Electric charging points are installed at 3 sites. Rapid chargers are installed at Cheltenham Railway Station. Chargers installed at Tesco and Lidl superstores. Promenade charging has not been installed to date. Look to install within parking areas of AQMA. If possible seek to install within Royal Mail site.
11	Increase Car Sharing in AQMA.	Alternatives to private vehicle use	Car & lift sharing schemes	GCC	2016			Will depend on uptake	Existing website available. Work to increase visibility and awareness		Parish Lift, Carshare Gloucestershire[1] available via GCC.

1 https://liftshare.com/uk/community/gloucestershire

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQM	Progress to Date	Estimated Completion Date	Comments
Measures for Consideration as part of wider Air Quality Strategy											
12	Adopt a Cheltenham Air Quality Strategy. Consider inclusion of measures from Clean Air Cheltenham's document and other community sources.	Policy Guidance and Development Control	Low Emissions Strategy	CBC with Local Councillors and Residents Action Group - Clean Air Cheltenham	2022	2024	Development of Air Quality Strategy		Under development	Strategy to be in place for ten years.	Strategy needs constant review and revision, not "shelving". Will require a specific target date for production and implementation and resources to deliver it.
13	Investigate Setting an annual mean target objective of 30ug/m³ NO_2 instead of the National objective of 40ug/m³.	Policy Guidance and Development Control	Other policy	CBC	2022	2023	To be supplemented by the Low Emissions Strategy (see measure 14). Initial KPI will be to reduce levels within the AQMA below 40ug/m³.	-10µg/m³ further to reduction below 40µg/m³ of NO_2	n/a	2030	
14	Investigate setting targets for PM_{10} and $PM_{2.5}$ in line with WHO guidance, and emerging DEFRA requirements	Policy Guidance and Development Control	Other policy	CBC	2022	2023	To be supplemented by the Low Emissions Strategy (see measure 14). Initial KPI will be to reduce levels within the AQMA below 40ug/m³.	Up to -10µg/m³	n/a	2030	Awaiting confirmation of $PM_{2.5}$ objectives to be set by Defra with Target Date of October 31st 2022.
15	Deliver a Schools AQ Project- Education and Awareness campaign	Policy Guidance and Development Control	Other policy	CBC / GCC	2022	2023	Schools / students engaged and making positive changes to travel options.			2025	Needs support of GCC.
16	Create Car-free Zones/ Emissions Charging Zones	Promoting Low Emission Transport	Low Emission Zone (LEZ) or Clean Air Zone (CAZ)	CBC	2022-2026	2030	Further investigative work to be done to determine how achievable this measure is and whether it is proportionate to the exceedances within the AQMA	Potentially very high but very speculative at this stage as likely to clash with policies to encourage use of the high street.	n/a		Needs support of GCC. Detailed plan needed before implementation, as no natural diversion routes around town centre, so closures / charging zones could lead to pollution elsewhere. Needs to be a component in a wider scheme.
17	Develop strategic routes; consider, closure of certain town-centre roads to certain vehicle-types	Transport Planning and Infrastructure	Other	GCC	2022	2025			n/a		Needs support of GCC and (possibly) national legislation. Difficult to enforce, and unpopular with a vocal minority.
18	Expand the existing Arle Court Park and Ride (https://www.gloucestershire.gov.uk/transport/park-ride-gloucester-and-cheltenham/changes-to-arle-court-park-ride/)	Alternatives to private vehicle use	Bus based Park & Ride	CBC	2022-2026	2030	Development in 2022	Studies to be completed as part of expansion	n/a		The Park and Ride at Arle Court has been redesigned improved. Possible scope for better public awareness of facility.

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19	Promote Cycling and upgrade of Infrastructure in line with Severn Vale Cycling and Walking Infrastructure Plan	Promoting Low Emission Transport	Promotion of cycling	GCC	2020	Ongoing	In line with Cycling and Walking Infrastructure Plan. https://www.gloucestershire.gov.uk/media/2095888/cycling-and-walking-infrastructure-plan-final-20200828.pdf				Elements of this measure are being brought forward under the West of Cheltenham improvement Scheme as well as a bid for A417 designated funds. There is also a small bid for town centre signage with the Capital Programme at present.
20	'Twenty is Plenty'	Transport Planning and Infrastructure	Reduction of speed limits, 20mph zones	CBC	Ongoing			Evidence is mixed as to efficacy of speed reduction.			The Cabinet working group are awaiting better guidance on the benefits and implementation. Assessed in the "Connecting Cheltenham" report (2020). The report was also issued to GCC to help inform their LTP as: "Introduce speed limits in accordance with the current national guidelines and prioritise them based on available evidence, including 20mph zones."
21	Implement alternative fuel sources for business fleet within the council	Promoting Low Emission Transport	Public Vehicle Procurement -Prioritising uptake of low emission vehicles	CBC	2022	2023	Increase in Euro VI and Electric Vehicles as part of local authority controlled vehicle fleet	NOx emission reduction achieved by the Council will be able to be calculated annually.		2025	Extend to Ubico / other ALMO and suppliers / contractors. Extend to non-fleet users. GCC Already investigating HVO Biofuel, possibility for joint project?
22	Phase out around 500 Euro V and older Taxis and replace with Euro VI vehicles.	Promoting Low Emission Transport	Taxi Licensing conditions	CBC	2022	2026	Ongoing reduction in Euro V taxis		n/a	2027	Gradual uptake as there has been recent requirement for taxis to be updated for accessibility
23	Install Charging points at taxi ranks	Promoting Low Emission Transport	Taxi emission incentives	CBC	2022	2026	Increase in Electric Taxis	Small impact upon NO_2 concentrations from measure individually, estimated to be less than 1µg/m³ based upon a low to medium uptake.	n/a		Licensing Team Leader update: In drafting this AQAP, it was highlighted that a very small number of taxis are currently electric or hybrid, the emphasis in recent years has been on making the taxis accessible to users with disabilities and so resources may be limited to update parts of the fleet immediately. Possible liaison with GCC planning more EVs at Taxi Ranks, CBC to be responsible for EVs in Car Parks. Planning to seek funding on the basis that we want taxi rank infrastructure in place by 2026/7.

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQM	Progress to Date	Estimated Completion Date	Comments
24	Promote Workplace Travel Plans	Promoting Travel Alternatives	Car & lift sharing schemes	GCC	Unknown			Will depend on uptake			Cheltenham Borough Council will introduce a Cycle to Work Scheme and are developing pool car and car sharing projects. These will be used to encourage businesses in Cheltenham to develop and implement similar plans. GCC can provide this service to employers.
25	Promote a No Idling Policy for Buses and Taxis	Promoting Low Emission Transport	Public Vehicle Procurement -Prioritising uptake of low emission vehicles	GCC	2018 and ongoing		KPI measured via an annual review of the number of fixed penalty fines and number of complaints received. We get zero complaints and issue zero fines (we have no power to issue fines)	Measure is an awareness raising tool. However, it is also a useful measure to prevent vehicles idling and causing congestion in specific locations, which is a significant cause of emissions.			No powers to prevent or penalise idling at roadside. The current fleet of Stagecoach buses now have a black box system which monitors driving behaviour and promotes more fuel efficient driving and anti-idling. Other operators may not use this technology.
26	Apply variable parking charges to incentivise use of EVs and Hybrids	Public Information	Other	CBC / GCC Partnership							Cheltenham and Gloucestershire County councils will also investigate the potential for differential parking charges for electric and hybrid vehicles on street and in car parks.
27	Publish AQ monitoring results using low-cost AQMesh sensors on accessible website	Public Information	Via the Internet	CBC	ongoing	ongoing	Continued upload of data onto monitoring site	Increases knowledge and understanding of air quality within the borough	n/a	Ongoing	Already available
28	Emissions Policy for Private Hire Vehicles	Promoting Low Emission Transport	Taxi Licensing conditions	CBC	ongoing	2022	Implementation of new policy	>1µg/m^3	n/a	Ongoing	CBC are in the process of developing the policy to implement the Cabinet Member Customer & Regulatory Services' ambition to move the taxi fleet to EVs by 2026/7. This policy will need to address the gradual phasing out of petrol and diesel vehicles, starting with the few Euro 4s and then eventually Euro 5 and 6 to EV over this period. Vehicle replacements will need to be Euro 6 as a minimum before converting to EV.