

Brighton & Hove City Council

Environment, Transport & Sustainability Committee

Agenda Item 49

Subject: Air Quality Action Plan 2022 Consultation Results

Date of meeting: 15th November 2022

Report of: Executive Director Economy, Environment & Culture

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Ward(s) affected: All

For general release

1. Purpose of the report and policy context

- 1.1 Under the provisions of Part-IV of the Environment Act (EA 1995) the local authority has a statutory duty to review and assess air quality in their area. Local Air Quality Management Policy Guidance (PG22) has been issued by the Secretary of State for the Department for the Environment, Food & Rural Affairs (DEFRA), and local authorities must have regard to it when carrying out their local air quality management duties.
- 1.2 Following the declaration of an Air Quality Management Area (AQMA), under section 84 (2)(b) of EA 1995 the local authority has a statutory duty to produce and consult on a draft Air Quality Action Plan (AQAP) and, following its approval, submit it to DEFRA. The latest AQMA amendments for Brighton & Hove were agreed by this committee and legally declared by the council in November 2020. The next review of AQMAs is scheduled for 2025, unless policy should change during the interim.
- 1.3 The AQMA declaration was made in relation to Nitrogen Dioxide (NO₂) and exceedance of the annual average and hourly standards set into legislation with EC directive 30 in 1999 (1999/30EC). The annual UK air quality standard for NO₂ is 40 µg/m³ (concentration of pollution in breathable air measured in micrograms per cubic meter). This objective is not aspirational and became a legally binding standard in 2010. 35 µg/m³ (-12%) is the level used beyond all reasonable doubt to compare monitored concentrations with the national standard.
- 1.4 Air pollution is the biggest environmental influence on human health, as it can impact on circulation and respiration due to the mixture of gas and particulate pollutants. Poor air quality can have a significant impact, especially for those with heart problems or respiratory conditions like asthma and lung disease.

- 1.5 This report outlines the responses received to the public consultation on the AQAP and levels of support for the proposed series of measures to improve air quality.

2. Recommendations

- 2.1 That the committee welcomes the inclusion of more ambitious targets in the Air Quality Action Plan for the protection of human health, which will work towards World Health Organisation guidelines (2021).
- 2.2 That the committee approves the 2022 Air Quality Action Plan in Appendix 2 of this report.
- 2.3 That the committee welcomes the continued work and investment to develop an expanded Ultra-low Emission Zone for the city.
- 2.4 That the committee requests officers to prioritise the development and delivery of a citywide Smoke Control Area to help tackle the harmful effects of particulate matter.
- 2.5 The committee welcomes the promotion of active travel and public transport as means to reduce emissions and improve local air quality.

3. Context and background information

- 3.1 The council's current AQAP was approved by this committee in October 2015. Since then, the council has published Annual Status Reports [ASRs] on air quality. Each ASR is appraised by DEFRA and this feedback is included in the AQAP.
- 3.2 The new AQAP covers the five-year period 2022-2027 and sets out a series of mitigation measures to improve air quality in Brighton & Hove. For a healthier city, it will help to reduce outdoor levels of NO₂ and particles. Priority will be ensuring that NO₂ levels are compliant with national air quality standards in the declared AQMAs, and that the council aims to work towards meeting the 2021 World Health Organisation [WHO] global air quality guidelines on thresholds and limits for key air pollutants that pose health risks. Some of the measures in the plan add value to reducing carbon emissions and therefore assist with the carbon neutrality target.
- 3.3 The 2022 AQAP includes evidence which identifies sources of emissions (gases and smoke) that impact most on life in the city. It outlines actions and priorities to improve air quality which will not only benefit residents and visitors to the city but also the wider Sussex region. It sets out geographically where NO₂ pollution is more concentrated and which vehicle category emissions are primarily responsible for its exceedance. This source apportionment varies considerably across the AQMAs. For example, along Rottingdean High Street NO₂ levels are mainly because of emissions from private diesel cars and vans. The contribution from petrol cars is less than 3%. In contrast, North Street NO₂ has been due to emissions from diesel buses and taxis and Lewes Road shows mixed contributions from lorries vans, buses, taxis, and private diesel cars with petrol

cars contributing less than 3% NO₂ to housing at roadside due to effective mitigation on the exhaust for petrol cars registered after 2006.

- 3.4 The plan includes over 60 proposed actions under five priority areas which are:
- Priority 1: Increase active travel, support mode shift including greater emphasis on public transport and reduce the need to travel
 - Priority 2: Encourage and support uptake of ultra-low and zero exhaust vehicles
 - Priority 3: Improve monitoring and public awareness
 - Priority 4: Reduce emissions from buildings and new development
 - Priority 5: Partnership working
- 3.5 Many of the actions in the AQAP reflect or continue existing measures or activities such as progressing the development and delivery of an expanded Ultra-low Emission Zone [ULEZ] for a wider area and different types of vehicles; working with schools and workplaces to develop Travel Plans; increasing the number of electric vehicle charging points to progress uptake in zero exhaust vehicle use; avoiding emissions from new development; responding to domestic smoke offences; public awareness campaigns; and working with bus and taxi operators to reduce emissions.
- 3.6 Following initial feasibility work, a further review has been undertaken to determine the requirements needed to progress the development of an expanded ULEZ and enable the financial viability of options to be assessed. This has included initial advice from the government's Joint Air Quality Unit, which concluded that computer-based modelling will be required to support the development work. An allocation of funding to develop a citywide transport model has now been agreed in the 2022/23 and 2023/24 budgets and an initial brief has been issued to begin this work and explore its use to support the ULEZ.
- 3.7 To assist the development of the expanded ULEZ, funding has also been allocated from the council's Carbon Neutral Fund to enable the installation of camera technology around or on entry to Air Quality Management Areas (AQMAs) to provide baseline and ongoing data collection about vehicle flows and emission categories of vehicles. This could be supplemented by grant funding from DEFRA, subject to a successful bid being announced next year.
- 3.8 The plan also includes new measures such as exploring ultra-low emission vehicles for the council's Home to School Services; developing an interactive online air quality map of the city's local monitoring sites; and delivering a citywide smoke control area to address smoke associated with solid fuel burning including wood, waste and coal.
- 3.9 Maintaining ambitious but achievable targets for air quality is also an important part of the plan. In 2021 the World Health Organisation (WHO) set more stringent guidelines for pollutants in outdoor air. The level of pollutants outdoors has a strong influence on indoor air quality. The WHO guidelines for NO₂ and particles have not been fully adopted by the government as air quality standards or statutory duties. The final AQAP sets out plans and measures with more ambitious targets for the protection of human health which will help work towards the guidelines published by the WHO in 2021.

- 3.10 The proposed local NO₂ objective for Brighton & Hove prior to 2027 is to reach an annual mean of 30 µg/m³ outdoor NO₂ by 2026. This is 25% lower than the minimum UK legal requirement of 40 µg/m³. This responds to feedback during the consultation. In the longer term, the council aims to work towards achieving the 2021 WHO guidelines for NO₂ that is 10 µg/m³.
- 3.11 In addition to the requirement to meet and surpass NO₂ standards in the declared AQMAs, the AQAP puts forward measures aimed at reducing outdoor concentrations and emissions of fine particles that is PM₁₀ and PM_{2.5} (Airborne Particulate Matter less than ten and 2.5 micrometers). The government is considering new targets for PM_{2.5} and the council has responded to the national consultation supporting more ambitious objectives to deliver cleaner air to benefit high population density. To reflect this, and respond to feedback prompted by the consultation, the AQAP now includes an objective for PM_{2.5} that is 7 µg/m³ by 2027, and 15 µg/m³ for PM₁₀ by 2024. Both targets are working towards the pollution levels in 2021 WHO guidelines.
- 3.12 The AQAP public consultation took place between May and July 2022 and generated just under 300 responses and comments. A summary of the headline results is included in section 5 of this report, and a full analysis of the feedback received to the AQAP consultation is included in Appendix 1 of this committee report. The consultation consistently showed a majority support for the priorities and recommended measures to reduce NO₂ and particulate levels across the city. Appendix 2 includes the final 2022 AQAP.

4. Analysis and consideration of alternative options

- 4.1 The council is required to produce an AQAP following the declaration of AQMAs in the city in 2020. The 2022 AQAP set out priorities for NO₂ and particulate improvement in future years and helps inform other policies. The number and extent of the actions proposed in the plan, alongside those that are outside the direct control of the council such as government policy, will significantly contribute to reducing harmful emissions during the plan period.

5. Community engagement and consultation

- 5.1 National Policy Guidance states that other local authority departments and external bodies should be constructively engaged in agreeing measures to improve air quality to surpass the legal requirements set out by air quality standard and targets. The AQAP follows on from public consultations on the Local Transport Plan (LTP5) and Local Cycling and Walking Infrastructure Plan (LCWIP 2022). These consultations also identified that more than three quarters of respondents rated reducing emissions and improving air quality as their highest priority.
- 5.2 The public consultation on the 2022 Air Quality Action Plan was open for approximately eight weeks from May 2022 to July 2022. In total, nearly 300 responses were received. The feedback has been analysed with regard to the resources, grants and funded projects that can be realistically delivered over the next five years.

- 5.3 The consultation has provided positive results and support for the content of the plan, and 64% of respondents felt informed about local air quality. The most important of the five priorities, based on the feedback received, is to reduce emissions from buildings and new development – identified by nearly 90% of respondents. Within this, 85% of respondents supported increased information on cleaner home heating and the subsidies available. There was 63% support for reducing the amount of solid fuel burning at home. 13% of respondents say they have switched to cleaner energy or home heating and a further 32% would like to with further support or lower prices.
- 5.4 Under travel priorities, nearly 90% of respondents support better public transport links and more than 92% of respondents support ultralow-low emission buses.
- 5.5 52% of respondents said they have access to a diesel car, van or bike that meets UK-ULEZ (Ultra-low Emission Zone) standards; while 31% of respondents said they have access to a car or van that does not meet UK-ULEZ standards. A significant proportion said they do not have access to a vehicle at all. 55% of respondents said they would like to purchase or hire a zero-exhaust vehicle. Nearly 20% have already done so. Vehicle cost has replaced availability of charging points as the main limiting factor. This reflects the success of the ongoing increasing provision of rapid and fast vehicle charging points across the city. Electromotive users continue to charge their vehicles slowly at home or at the workplace.
- 5.6 Raising and increasing awareness of air quality is key to achieving change that will reduce emissions and 91% of respondents say they would use an air alert system, like that provided by the meteorological office, to improve public awareness. 87% of respondents said they would use online, real-time air quality information.
- 5.7 Correspondence received during the consultation has also highlighted the need for regular monitoring and reporting, and interim targets. Monitoring takes place annually within the council's Annual Status Report [ASR] to enable the long-term trend in air quality improvement to be tracked, and the plan now includes interim targets for NO₂ and PM_{2.5}.

6. Conclusion

- 6.1 The Air Quality Action Plan is a key document for operational and high-level decision making in relation to major council strategies, including Transport, Planning, Parking, Tourism, Public Health and Regulatory Services and Enforcement. It is a material consideration relating to development management/planning and transport projects.
- 6.2 The plan will be delivered through a series of existing and future actions and investment. For example, the Bus Service Improvement Plan will further support modern buses. Government grants and bus operators and have funded delivery of cleaner buses through exhaust upgrades and new vehicle procurements as well as greater incentives to increase public transport use and access.

- 6.3 Funded projects will improve monitoring, air quality assessment and community engagement and help improve public information and awareness regarding the links between pollution and health. The delivery of ultra-low and zero emission measures and policies will support this.
- 6.4 Addressing the impacts of persistent domestic smoke and its contribution to harmful Particulate Matter is a growing concern, and it is recommended that this is progressed as a particular priority by developing and delivering a citywide smoke control area. Starting work on this in advance of the forthcoming winter season would be beneficial in highlighting the effects of smoke on people's health at this time of year.

7. Financial implications

- 7.1 The costs of undertaking the AQAP consultation have been funded from within existing revenue budgets.
- 7.2 Delivery of the measures within the Air Quality Action Plan requires funding from a number of sources. These include grants secured via successful bids led by council's Air Quality Officer, alongside partners in the Sussex Air Partnership. Recent success includes securing more than £1 million of grant funding for bus exhaust upgrades, further pollution monitoring, air quality assessment, awareness raising and community engagement. The most recent bid (late 2022) seeks to provide infrastructure to take forward and expanded Ultra-low emission zone and improved smoke control.
- 7.3 Funding for measures has also been included in the council's Carbon Neutral Fund and Local Transport Plan capital programme. An expression of interest has been made to the council's Carbon Neutral Fund for further vehicle counters and smart cameras to determine accurate emission categories of the vehicle fleet compared to UK-ULEZ standards.
- 7.4 Where necessary, funding requirements for individual actions will need to be identified and secured from within revenue and capital budgets. This would include those necessary to support the enforcement of a citywide smoke control area.

Name of finance officer consulted: John Lack: Date consulted: 17/08/2022

8. Legal implications

- 8.1 The process of Local Air Quality Management is set out under Part IV of the Environment Act 1995 and Air Quality Regulations. The Act places the Council under a legal duty to prepare and revise an action plan in relation to an area designated as an Air Quality Management Area. The Council is required to consult on the preparation of an Air Quality Action Plan. The purpose of the action plan is to ensure that the Council and its partners takes suitable action to improve air quality within the designated area to ensure compliance with established legal standards.
- 8.2 The council has a statutory duty to make sure existing pollution concentrations are improved and comply with the law to reduce the harm that may occur in places

where people spend time. The action plan sets out objectives over the next five years to work toward more ambitious international guidelines for particles and NO₂ that aim to improve air quality for everyone.

Name of legal officer consulted: Alice Rowland: Date consulted: 24/10/22

9. Equalities implications

- 9.1 Public Health England state that there is often a strong correlation with equalities issues because areas with poor air quality are also often less affluent areas. More affordable, but poorer quality, housing is often sited next to busy roads and junctions where pollution levels are relatively high. This is reflected in the city where residential uses are adjacent to several transport corridors within the city's designated AQMAs.
- 9.2 The Local Insight report for the central AQMA showed that the relatively polluted areas, had higher levels of poor health, hospital admissions and shorter male life expectancy compared to Brighton & Hove and England averages.
- 9.3 An Equalities Impact Assessment has been completed to ensure that the AQAP does not disproportionately affect those people with a protected characteristic such as a disability. The plan will also help improve the quality of life of those households, individuals, and businesses within AQMAs where there is relatively persistent pollution compared to the rest of the city, and where people spend time.

10. Sustainability implications

- 10.1 The primary requirement of the city's AQAP and current ULEZ is to eliminate non-compliant NO₂ levels in the local environment. The AQAP aims to reduce harmful emissions and exposure to pollution. This has co-benefits for health, the urban realm, sustainability, energy reduction, circular economy, carbon reduction, and promoting and enabling cycling and walking as a regular travel choice for day to day and leisure activities.
- 10.2 Carbon dioxide is not considered to be an air pollutant, and therefore the measures in this action plan are not directly aimed at reducing CO₂ emissions from the city. However, a number of actions will have beneficial effects in terms of reducing overall vehicle journeys, reducing fuel demand or switching to zero emission options.
- 10.3 CO₂ has the effect of reducing oceanic alkalinity and the 'acidification' is harmful to marine life and reduces the ability of the sea to absorb greenhouse gases and circulate oxygen.
- 10.4 Bonfires and disposable barbecues can cause smoke nuisance and during dry conditions they are also a wildfire hazard that releases additional carbon and smoke to the atmosphere. Fires pose a risk to life and property and generate a significant source of particulate matter.

11. Social Value and procurement implications

- 11.1 There are no direct procurement implications associated with the AQAP consultation. The council is seeking opportunities to tackle inequalities, improving local air quality helps to support these aims.
- 11.2 The Council has a statutory requirement to consider social and environmental well-being in connection with public service contracts. This will be considered for procurements in support of the AQAP.

Crime & disorder implications:

- 11.3 There are no direct crime and disorder implications associated the consultation on the AQAP. Engine idling for more than 90 seconds (when not moving) is an offence that is against the law, and the plan proposes to raise awareness of this through advice to motorists to switch off engines in these circumstances to avoid unnecessary emissions.

Public health implications:

- 11.4 Airborne pollution is inhaled across Brighton and Hove. The most vulnerable people include infants, the elderly and those with existing illness such as asthma, covid, cardiac obstructive pulmonary disease, bronchitis and lung cancer.
- 11.5 Within the declared AQMA areas, NO₂ continues to exceed or risk exceeding legal limits for the protection of human health that is justified by respiratory and circulatory wellbeing. The reduction in daily and annual particulate levels across the city achieved through the delivery of the AQAP will have health benefits at an individual and population level.

Supporting Documentation

1. Appendices

- 1 - Analysis of Consultation Feedback on draft 2022 Air Quality Action Plan
- 2 - 2022 Final Air Quality Action Plan

2. Background documents

- 1. BHCC 2022 Annual Status Report on Air Quality (during 2021)
- 2. 2021 WHO Air Quality Guidelines : [New WHO Global Air Quality Guidelines aim to save millions of lives from air pollution](#)
- 3. Local Air Quality Management [Policy Guidance LAQM.PG22](#)