

Greater Cambridge Air Quality Strategy (2024- 2029)

**To:**

Councillor Rosy Moore, Executive Councillor for Climate Action and Environment

Environment and Community Scrutiny Committee

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Report by:

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Wards affected:

City Wide

Key Decision

1. Executive Summary

- 1.1 Local Air Quality Management (LAQM) requires Local Authorities to monitor key pollutants (NO₂ & PM₁₀) across their district and report against target levels. Data shows objective levels have now been achieved across Cambridge. National legally binding PM_{2.5} targets have been set under the Environmental Target Regulations and levels in Cambridge are around the target annual mean.
- 1.2 As objective levels have been achieved within the Air quality Management Area (AQMA) we are required to revoke this; negating the need for an Air quality Action Plan. Under the Environment Act 2021 an Air Quality Strategy is required if LAQM objective levels are achieved. The Strategy must outline how air quality will be maintained and improved; including how it will help achieve national PM_{2.5} targets.
- 1.3 It was agreed at the Environmental & Community Scrutiny Committee, October 2023 to pursue a joint Air Quality Strategy with South Cambridgeshire District Council (SCDC) and to work towards World

Health Organisation (WHO) air quality guideline targets. SCDC agreed these decisions at their equivalent committee in December 2023.

- 1.4 It is widely accepted that there is no safe level of air pollution. Greater Cambridge is a major growth area with large scale development and population increase coming forward in the next 10-20 years. This Strategy seeks to strike a balance in supporting the productivity, economy, and prosperity of Greater Cambridge; whilst continuing to deliver improvements in air quality and the positive health outcomes that improved air quality will deliver for both residents and visitors to the Greater Cambridge area. The Strategy focuses on sources of pollution that can be influenced locally by all partner organisations.
- 1.5 Interim targets have been set to be delivered over the lifetime of the strategy. Where appropriate, mechanisms for delivering these improvements working alongside delivery partners have been identified. These are outlined as an Action Plan (Appendix B of the Strategy). For ease of access the Action Plan has been attached to this report as a separate document (Appendix B).
- 1.6 This strategy meets our legislative responsibilities under LAQM.

2. Recommendations

The Executive Councillor is recommended to:

- 1) Approve the adoption of the 'Greater Cambridge Air Quality Strategy' as Appendix A.

3. Background

3.1 Legislative & Policy Framework

- 3.1.1 Local Air Quality Management (LAQM) requires Local Authorities to monitor key pollutants (NO₂ & PM₁₀) across their district and report against target levels. If key pollutants exceed objective levels, then an Air Quality Management Area (AQMA) must be declared alongside an Air Quality Action Plan (AQAP) outlining how pollutants will be reduced. Data shows objective levels have now been achieved across Cambridge. National legally binding PM_{2.5} targets have been set under

the Environmental Target Regulations and levels in Cambridge are around the target annual mean.

3.1.2 We are required to revoke the AQMA now that objective levels are achieved, negating the need for an AQAP. Under the Environment Act 2021 Local Authorities are required to produce an Air Quality Strategy if objective levels are achieved: outlining how air quality will be maintained and improved; including how it will help achieve national PM_{2.5} targets.

3.1.3 Measures to improve air quality are typically complimentary to the climate change agenda and support the council's commitment to become carbon neutral by 2030.

3.2 Air Quality & Health

3.2.1 It is widely accepted that there is no safe level of air pollution. Research undertaken by the Committee on Medical Effects of Air pollution (COMEAP) concluded that, even low concentrations of pollutants are likely to be associated with adverse effects on health.

3.2.2 The World Health Organisation (WHO) produced updated Air Quality Guidelines (AQG) in 2021. These targets are based on the evidence linking concentrations of pollutants in ambient air with adverse effects on health and are targets that protects public health. COMEAP considers these WHO 2021 guidelines as suitable long-term targets. It was agreed to work towards these levels as long-term targets at the Environmental & Community Scrutiny Committee, October 2023.

3.2.3 Given the scale of development and population increase coming forward in the next 20 years through the emerging Greater Cambridge local Plan (2020 – 2041) including measures in place to meet 58,500 new jobs across all employment sections and 44,400 new homes, the challenge is how we can continue to deliver improved air quality across greater Cambridge and deliver the health benefits this offers.

3.3 Greater Cambridge Air Quality Strategy

3.3.1 The Greater Cambridge Air Quality Strategy sets out the vision for continued improvements to air quality focussing on sources of pollution that can be influenced locally by all partner organisations, working across a range of disciplines which all either directly or indirectly offer improved air quality. The primary objectives of the Strategy are:

- Continue to meet and deliver all legislative and policy requirements associated with air quality.
- Continue to improve air quality across Greater Cambridge enhancing the health of those living, working, and visiting Greater Cambridge
- Work towards World Health Organization Air Quality Guideline annual averages as longer-term targets with interim targets for delivery within the lifetime of the Strategy (5 years).

3.3.2 Not all sources of air pollution impacting Greater Cambridge originate from within the districts; this means setting timelines for achieving WHO guideline levels may not be attainable in all cases at this time. For some pollutants achieving these levels will require policy intervention not only locally but nationally and internationally. However, commitment to work towards these levels will help drive improvements, enhancing the health of those living, working, and visiting the Greater Cambridge area. Interim targets based on interim targets set by WHO have been agreed that are considered achievable within the lifetime of the strategy (5 years, 2024 to 2029 inclusive):

Pollutant	Interim Target Level*	WHO 2021
PM ₁₀ µg/m ³	20 µg/m ³	15 µg/m ³
NO ₂ µg/m ³	20 µg/m ³	10 µg/m ³
PM _{2.5} µg/m ³	10 µg/m ³	5 µg/m ³

3.3.3 The objectives of the Strategy across Greater Cambridge will be delivered under four key priority areas:

Key Priority 1: Regulatory Policies & Development Control

Minimising emissions through development is key. Proposed measures will design out air quality impacts during both construction and operation phases to prevent ‘creep’ as large scale development comes forward.

Key Priority 2: Infrastructure Improvements

Continuing to work with partners to deliver improved infrastructure; facilitating the uptake of more sustainable transport solutions and active travel options.

Key Priority 3: Community Engagement & Promotion

In parallel to active measures to reduce exposure to pollutants we need to actively promote and engage with residents and visitors enabling access to better information to facilitate behavioural change. We will continue to work closely with Public Health.

Key Priority 4: Monitoring

Continued monitoring is required given the scale of the future developments and the potential to introduce new hotspots where air quality could be at risk, the need for a robust and up to date monitoring network across the district is a priority.

3.3.4 The Strategy includes an Action Plan (Appendix B). This details measures for delivering air quality improvements within the lifetime of the Strategy. The lifetime of the Strategy is 5 years, 2024 – 2029 inclusive.

3.3.5 Both Cambridge City and SCDC have an extensive network of monitoring across their districts. Monitoring results will reflect how successful the measures in the Action Plan have been. Progress of the Strategy and Action Plan will be reported quarterly at Steering Group meetings and annually within the Annual Status Report which all local authorities are required to submit to DEFRA (Department for Environment, Food and Rural Affairs).

4. Implications

a) Financial Implications

- 4.1 Existing budgets are in place to support air quality monitoring within the city. Existing continuous monitors collect data for NO₂ and a combination of PM_{2.5} or PM₁₀ at 4 locations. However, these units are currently being replaced under a previously secured budget with all units due to be installed by the end of 2024. When all units have been upgraded, we will be able to monitor NO_x, PM₁₀ and PM_{2.5} at all continuous monitor sites.
- 4.2 There are no additional financial implications from implementing an Air Quality Strategy apart from potential improvement projects that would be subject to bids to central government or the County Council.

b) Staffing Implications

- 4.3 The introduction and maintaining of the strategy would be covered under existing staffing arrangements. Air quality monitoring is already undertaken.

c) Equality and Poverty Implications

Public Health data indicates that in 2020, 48 deaths in Cambridge could be attributed to Particulate Air Pollution. This figure is calculated based on the number of deaths in Cambridge in 2020 and the Public Health Outcomes Framework Fraction mortality due to particulate air pollution. Currently PM_{2.5} is considered the most suitable metric for evaluating health impacts.

We know that improving air quality has positive impacts for children, older people, disability (mitigating or preventing ill health relating to asthma, coronary heart disease, stroke, lung cancer, chronic bronchitis, and diabetes), and pregnancy (reducing low birth weight). In addition, studies have linked exposure to air pollution with deprivation and deprivation with ethnicity.

Therefore, the protected characteristics which are most relevant are age, pregnancy and maternity, race, and disability. An Equality Impact Assessment has been completed and is attached to this report as Appendix C. The measures detailed within the strategy aim to deliver improved air

quality within Cambridge City which will have a positive impact on these groups.

d) Net Zero Carbon, Climate Change and Environmental Implications

Rating: Medium Positive

The Greater Cambridge Air Quality Strategy (2024 – 2029) outlines measures for improving air quality across Greater Cambridge; working towards agreed interim targets which are achievable within the lifetime of the strategy and longer term working towards WHO Air Quality guidelines as the air quality standard. The strategy identifies opportunities for improving air quality which are included within the strategy under Appendix B as an Action Plan for delivery. Measures to improve air quality are typically complimentary to the net zero carbon agenda. Examples of measure within the strategy that will also reduce carbon include, measures for new development to minimise emissions through design seeking alternatives to combustion emissions from boilers e.g. ASHP's, ensuring design enables easy access to public transport and active travel and incorporates appropriate levels of EVCP (Electric Vehicle Charge Points) within the design where car parking is required. The strategy seeks to prevent 'creep' in air pollution levels from large scale development coming forward and continue to improve air quality by working with partners on wider infrastructure projects to reduce reliance on private vehicles and facilitate the use of public transport and active travel. Improved air quality has a positive impact on biodiversity. Poor air quality (particularly ammonia and Nitrogen dioxide) is a major contributor to the long-term decline of biodiversity in the UK. Whilst this proposal is unlikely to lead to positive benefits across all key areas it is not expected to have any negative impacts which is the reasoning for the proposals overall rating

e) Procurement Implications

N/A

f) Community Safety Implications

N/A

5. Consultation and communication considerations

- 5.1 The strategy has been developed by key officers in both Cambridge City and SCDC with input throughout the process from key delivery partners including Public Health, Greater Cambridge Planning Service, Greater Cambridge Partnership, Cambridgeshire County Council and Cambridge and Peterborough Combined Authority. The Draft Strategy was open for wider public consultation on citizen Lab between 18th January and 19th February 2024 with publicity to promote the consultation via Cambridge Matters, Press Releases, and social media. 383 responses were received representing both city and south Cambridgeshire. 71.9% of the responses were in support of the proposals.
- 5.2 The main comments from the Strategy highlighted the willingness of the public to undertake actions to improve air quality. However, the barriers to improvements were lack of public transport and the state of roads, cycle paths and footpaths in Greater Cambridge to allow active travel options. The public showed a willingness to convert to more sustainable lifestyles by expressing a wish to purchase electric vehicles but were concerned about the costs and availability of charge points. The public also wants to use sustainable forms of heating such as solar panels, air source heat pumps and ground source heat pumps but were concerned about the lack of information available on how to install these and the associated costs. The responses also highlighted that the public wishes to see more action taken on reducing emissions associated with solid fuel burning, and the planting of more trees to improve the environment.
- 5.3 The responses have been fed into the final version of the strategy. Appendix D provides a summary of the responses received through the consultation.
- 5.4 The full strategy will be promoted more widely once the report has been finalised and approved at relevant committees.

6. Background papers

Background Papers Used in the preparation of this report:

1. Local Air quality Management Policy guidance (PG22), August 2022
[England \(exc. London\) Policy Guidance | LAQM \(defra.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/100000/England_exc_London_Policy_Guidance_LAQM_defra.gov.uk)
2. Local Air Quality Management Technical Guidance (TG22), August 2022

[UK Regions \(exc. London\) Technical Guidance | LAQM \(defra.gov.uk\)](#)

3. Air Quality Strategy: Framework for Local Authority Delivery
www.gov.uk/government/publications/the-air-quality-strategy-for-england

4. Air Quality Annual Status Report 2023
www.cambridge.gov.uk/air-pollution-measurements

5. COMEAP Annual Report 2022
www.gov.uk/government/publications/comeap-annual-report-2022

6. COMEAP Response to publication of WHO Air Quality Guidelines
[COMEAP statement: response to publication of the World Health Organization Air quality guidelines 2021 - GOV.UK \(www.gov.uk\)](#)

7. World Health Organisation Air Quality Guidelines (2021)
www.who.int/news-room/questions-and-answers/item/who-global-air-quality-guidelines

7. Appendices

- A. Greater Cambridge Air Quality Strategy
- B. Appendix B - Action Plan-Measures for delivering key priorities.
- C. Equality Impact Assessment
- D. Summary of consultation Responses

8. Inspection of papers

N/A