

South Cambridgeshire District Council

Air Quality Strategy

2021-2025



Executive Summary

Under the requirements of Local Air Quality Management (LAQM) as set out in Part IV of the Environment Act (1995), local authorities have a duty to review and assess air quality within their areas, against the air quality objectives¹ and to determine whether these are likely to be achieved. Where the air quality objectives are not being achieved, or are not likely to be achieved, local authorities must designate an Air Quality Management Area (AQMA) and develop an Air Quality Action Plan (AQAP) detailing remedial measures to tackle the problem within their AQMA. In addition to the formal obligations for Local Air Quality Management (LAQM), local authorities are also encouraged to draft and implement a local air quality strategy.

South Cambridgeshire District Council (SCDC) has declared one AQMA along the A14 between Bar Hill (to the north-west of Cambridge) and Milton interchange (to the north-east) in 2008. An air quality monitoring network has been in place since and monitoring results have been reported annually² to Department for Environment, Food and Rural Affairs (DEFRA)³. A trend of decreasing monitored concentrations has been recorded within the AQMA, with no exceedances above the objective levels for any pollutant since 2014. Revocation of the AQMA was proposed in the Council's Air Quality Annual Status Report, reported 2021, and has been accepted by DEFRA.

This strategy sets out a new approach to shift our focus and resources towards identifying potential new hotspots across the district and implement any measures necessary to ensure compliance with the air quality objectives, while continuing to monitor the former AQMA.

Air pollutants of concern are primarily transport related in areas of growth and the major roads running through the district. South Cambridgeshire has good rail and road links with London and the South-East region, including the A14 and M11/A11 corridors, with a high traffic volume. Given that future developments in the district are

¹ Details in section one LAQM framework

² <https://www.scambs.gov.uk/environmental-health/pollution/air-pollution/local-air-quality-management/>

³ <https://laqm.defra.gov.uk/>



mainly residential and reliant on road-based transport for travel, there is the potential for cumulative impacts on our air quality.

This strategy outlines three focussed actions to ensure that:

1. air quality is monitored and understood district wide and appropriate measures are introduced to meet air quality objectives,
2. policies are in place to minimise impacts from future developments and
3. public engagement is aimed at increasing local knowledge and supporting better choices in reducing daily impact on air quality.

It is important to note that the Council wish to achieve the objectives of this strategy by working closely with stakeholders such as Cambridge City Council and Greater Cambridgeshire Partnership, Planning and Policy department, Transport Planners and Public Health professionals, developers and our residents.



1 Local Air Quality Management

Local authorities have a duty under the requirements of Local Air Quality Management (LAQM) as set out in Part IV of the Environment Act (1995), to review and assess local air quality within their areas, against a set of air quality objectives and to determine whether or not these are likely to be achieved. Where an exceedance is considered likely the local authority must declare an Air Quality Management Area (AQMA) and prepare an Air Quality Action Plan (AQAP) setting out the measures it intends to put in place in pursuit of these objectives.

The statutory air quality objectives applicable to LAQM in England are presented in Table 1.

Table 1 – Air Quality Objectives in England

Pollutant	Air Quality Objective: Concentration⁴	Air Quality Objective: Measured as
Nitrogen Dioxide (NO ₂)	200µg/m ³ not to be exceeded more than 18 times a year	1-hour mean
Nitrogen Dioxide (NO ₂)	40µg/m ³	Annual mean
Particulate Matter (PM ₁₀)	50µg/m ³ , not to be exceeded more than 35 times a year	24-hour mean
Particulate Matter (PM ₁₀)	40µg/m ³	Annual mean
Sulphur Dioxide (SO ₂)	350µg/m ³ , not to be exceeded more than 24 times a year	1-hour mean
Sulphur Dioxide (SO ₂)	125µg/m ³ , not to be exceeded more than 3 times a year	24-hour mean
Sulphur Dioxide (SO ₂)	266µg/m ³ , not to be exceeded more than 35 times a year	15-minute mean

The Annual Status Report (ASR) is an annual requirement reporting the results of the monitoring network and showing the strategies employed by local authorities to improve air quality and any progress that has been made on these.

⁴ The units are in microgrammes of pollutant per cubic metre of air (µg/m³).



In addition to the formal obligations for Local Air Quality Management (LAQM), local authorities are also encouraged to draft and implement a local air quality strategy.

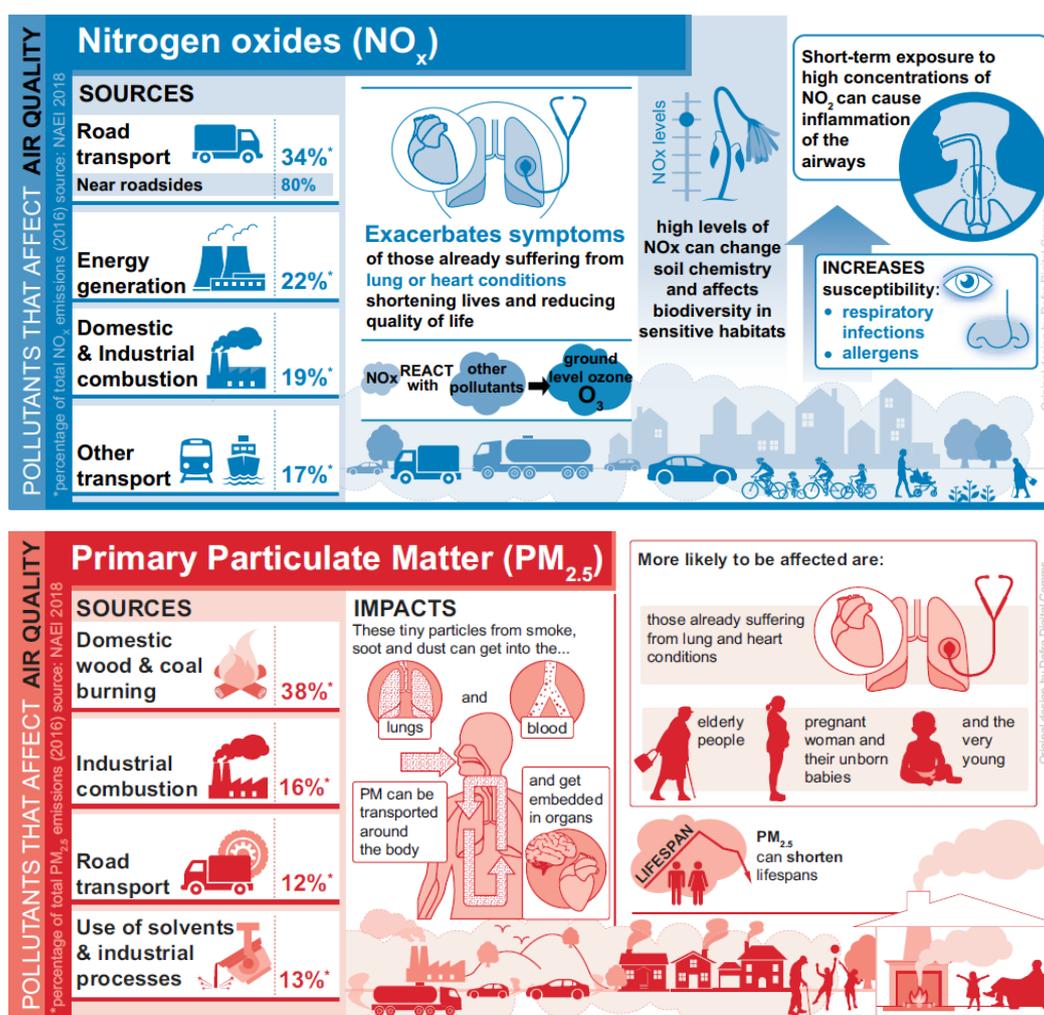
This strategy sets out a new approach to shift our focus and resources towards identifying potential new hotspots across the district and implement any measures necessary to ensure compliance with the air quality objectives, while continuing to monitor the former AQMA.



2 Public Health

Air pollution is associated with several adverse health impacts and is recognised as a contributing factor in the onset of heart disease and cancer. Additionally, 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.^{5,6} There is clear evidence that PM_{2.5} (particulate matter with an aerodynamic diameter of 2.5µm or less) has a significant impact on human health, including premature mortality, allergic reactions, and cardiovascular diseases.

Figure 1 – Health Impacts from NO_x and PM_{2.5}⁷



⁵ Public Health England. Air Quality: A Briefing for Directors of Public Health, 2017

⁶ Defra. Air quality and social deprivation in the UK: an environmental inequalities analysis, 2006

⁷ Defra. Clean Air Strategy, 2019



3 The Ambition and Future Actions

South Cambridgeshire District Council wish to maintain and improve air quality for all residents whilst supporting the growth across the district. Our ambition is to consider air quality in all aspects of services and in line with 'Being Green to our Core' priorities. This strategy outlines three focussed actions to achieve these forward-thinking goals.

3.1. Focussed Action A: Policies and future developments

The challenge of maintaining good air quality in the wider district is to minimise the cumulative impacts from all new developments. Emissions from an individual development may be associated with transport or combustion processes providing heat and power.

At the strategic level, spatial planning can provide for more sustainable transport links between the home, workplace, educational, retail and leisure facilities, and identify appropriate locations for potentially polluting industrial development⁸. As such, land-use planning can play a critical role in improving local air quality.

Documents such as the Local Plan and Supplementary Planning Documents (SPD) should consider air quality and include policies to minimise the impacts of new developments at the outset as much as possible. This could be achieved through policies that:

- reflect the desirability of reducing the demand for road journeys with polluting vehicles
- complement other design and mitigation options, such as travel planning and low emission strategies to promote behavioural change and modal shift towards more sustainable transport
- facilitate the uptake of low emission vehicles such as provision of electric vehicle charge points
- align with other policies aimed at increasing sustainability and reducing greenhouse gas emissions
- promote high quality building standards and reducing energy use

⁸ IAQM & UKEP Land-Use Planning & Development Control: Planning For Air Quality (Jan 2017)



- facilitate overall emissions reduction in an area over time by installing new, and cleaner technologies
- promote dust control measures during construction of major developments.

As such, efforts should be made to ensure that future Local Plans, Supplementary Planning Documents (SPD) in support of the Local Plan and site-based Supplementary Planning Documents for major developments continue to include improved policies and guidelines to protect and improve air quality.

It is important that planning policies should sustain compliance with, and contribute towards, meeting national objectives for air pollutants, taking into account the presence of Air Quality Management Areas (AQMAs) and the cumulative impacts on air quality from individual sites in local areas. Planning decisions should ensure that any new development in an Air Quality Management Area is consistent with the corresponding Air Quality Action Plan (AQAP).

The Local Plan (2018) includes a policy on air quality CS/12 and recognises the link between air pollution and transport. This has been linked to the transport policy TI/2 which subjects the major developments with significant transport implications to a site based Low Emission Strategy (LES), seeking implementation of low emission measures and facilitating sustainable transport to minimise the impact on local air quality.

3.2. Focussed Action B: District wide monitoring network

Future developments in SCDC are to be largely residential and reliant on road-based transport for travel and commuting to Cambridge, London and the surrounding area. The majority of the growth is associated with significant developments such as Northstowe to the north west of Cambridge, Waterbeach New Town to the north east of Cambridge, Bourn Airfield and Cambourne West to the west of Cambridge.

Given the scale of the future developments and their 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.



Therefore, the monitoring network should:

- 1) Be subject to regular review and update to reflect the growth across the district
- 2) Consider and include new technologies and alternatives to traditional monitors enabling the Council to conduct short term monitoring in the areas of concern

3.3. Focussed Action C. Engagement with existing communities

Our communities should be considered in all opportunities to benefit from improved air quality. This could be achieved through a range of actions big or small, such as provision of significant infrastructure to facilitate the uptake of low emission vehicles, to daily practical measures which in turn lead to protected and improved air quality.

The following are some examples to consider for public engagement:

- 1) Supporting local initiatives to promote awareness on air quality
- 2) National and regional campaigns such as Clean Air Day
- 3) Promotion of a non-idling policy during collection and drop off near schools
- 4) Promotion to reduce the use of solid fuel stoves and open fires
- 5) Close partnership with local businesses to reduce emissions



4 Conclusion

This document sets out the new air quality strategy for maintaining and improving air quality in South Cambridgeshire. It identifies three focussed actions to achieve our goals: policies and future developments, monitoring and community engagement. Reports on the proposed actions will be provided within the Council's Air Quality Annual Status Report each year, which will be available on our website. Furthermore, short term progress reports will be presented internally to different Committees such as the Climate and Environment Advisory Committee (CEAC) of the Council to highlight our commitment to progress over the time frame of this strategy.