Lewes District Council

Air Quality Action Plan

In fulfilment of Part IV of the Environment Act 1995, as amended by the Environment Act 2021

Local Air Quality Management

March 2025

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Report Reference Number	AQAP_LDC_2024
Date	March 2025

Executive Summary

This 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 actions we will take to improve air quality in Lewes District Council between 2025 – 2029. The AQAP sets out how the local authority will exercise its functions in order to secure the achievement of the air quality objectives.

This action plan is a draft version and will be adopted from Summer 2025. Implementation of the outlined measures will result in the relevant objective(s) being attained by 2025 for the Lewes Town AQMA and 2027 for the Newhaven Ring Road AQMA (subject to no significant increase in traffic count).

The relevant Air Quality Management Areas (AQMAs) addressed by this action plan are outlined below:

- Lewes Town Centre AQMA, declared for the Nitrogen Dioxide (NO_2) annual mean Air Quality Objective (AQO) (declared since 30/06/2005);
- A259 Newhaven Ring Road AQMA, declared for the NO_2 annual mean AQO (declared since 16/07/2014).

This action plan replaces the previous action plans which ran from 2009 for Lewes Town Centre AQMA and 2016 for A259 Newhaven Ring Road AQMA. Projects delivered through the past action plan include:

- “White Hill / Fisher Street / West Street Scheme” was completed in April 2013 with following monitoring indicating a reduction in NO_2 concentrations.
- Beddingham Crossing (Local Transport Plan - LTP) - Rebuilding the Southerham and Beddingham roundabouts on the A27 outside Lewes and a new railway bridge to avoid queuing at Beddingham rail crossing. This has reduced congestion and emissions on the A27.
- Lewes Town Centre 20 mph zone.
- The Living Cliffe (LTP) - Creation of pedestrian zone in Cliffe High Street with restricted vehicular access. This has improved safety, walking and cycling facilities, and reduced impact of cars outside the AQMA.

- Offham Road Pedestrian Priority Scheme (LTP): Improvement to pedestrian facilities and vehicle speed management.
- Lewes Railway Station Forecourt Scheme (LTP): Improved facilities for pedestrians, buses and taxis.
- Car-sharing Database (LTP+) - Support LTP car-sharing.
- Improved cycling facilities across the district.

Air pollution is associated with a number of adverse health impacts. It 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 less affluent[1,2].

The UK Health Security Agency (formally Public Health England) has estimated that the costs of air pollution in England to health and social care services could reach between £5.3 and 18.6 billion between 2018 and 2035 [3]. Lewes District Council is committed to reducing the exposure of people in Lewes to poor air quality in order to improve health.

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

1. Alternatives to private vehicle use
2. Promoting travel alternatives
3. Public information
4. Transport planning and infrastructure
5. Traffic management

[1] Environmental equity, air quality, socioeconomic status and respiratory health, 2010

[2] Air quality and social deprivation in the UK: an environmental inequalities analysis, 2006

[3] Public Health England. Estimation of costs to the NHS and social care due to the health impacts of air pollution: summary report, May 2018

Our priorities are based on identifying measures that can lead to improvement in air pollution levels, raising the profile of air pollution issues within the district and working with partners and stakeholders to identify further measures.

In this AQAP, we outline how we plan to effectively tackle air quality issues within our control. However, we recognise that there are a large number of air quality policy areas that are outside of our influence (such as vehicle emissions standards) but for which we may have useful evidence, and so we will continue to work with regional and central government on policies and issues beyond Lewes's direct influence.

Responsibilities and Commitment

Part IV (Sections 80 to 91) and Schedule 11 of the Environment Act sets out the legal obligations on local authorities in relation to LAQM. The Environment Act 2021 amends Part IV of the Act to clarify duties and enable greater cooperation between different levels of local government, neighbouring authorities and other relevant public authorities in the preparation of AQAPs so that a more strategic view is taken in respect of the achievement of air quality objectives.

This AQAP was prepared by the Regulatory Services Department of Lewes District Council and has been approved by:

- Emily O'Brien, Lead Member for Sustainability LDC
- Laurence O'Connor, Lead Member for Planning LDC
- Jon Wheeler, Head of Transport Planning ESCC

This AQAP will be signed off by a Director of Public Health.

The following Air Quality Partners / stakeholders have contributed to the development of the AQAP and will be committed to delivery of actions:

- National Highways
- The Environment Agency
- East Sussex County Council (Transport Infrastructure Planning, Active Transport Schemes, Passenger Transport Services)
- South Downs National Parks Authority
- Lewes District Council Lead Member for Sustainability

- Lewes District Council Lead Member for Planning
- LDC Planning Policy Team Lead Officer
- LDC Sustainability Team
- LDC Newhaven Regeneration Team
- Lewes Town Council
- Newhaven Town Council
- Ouse Valley Climate Action
- Cycle Lewes
- Lewes Movement Strategy Project Board
- Cycle Seahaven

This AQAP will be subject to an annual review, appraisal of progress and will report to the Policy and Performance Advisory Committee. Progress each year will be reported in the Annual Status Reports (ASRs) produced by Lewes District Council, as part of our statutory Local Air Quality Management duties.

If you have any comments on this AQAP please send them to Rachel Sadler at:

Rachel.Sadler@lewes-eastbourne.gov.uk or environmentalprotection@lewes-eastbourne.gov.uk

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1 Introduction

This report outlines the actions that Lewes District Council will deliver between 2025 - 2029 in order to reduce concentrations of air pollutants and exposure to air pollution; thereby positively impacting on the health and quality of life of residents and visitors in the Lewes area. The purpose of the report is to set out how the local authority will exercise its functions in order to achieve the relevant air quality objectives. This action plan is a draft version and will be adopted from summer 2025.

It has been developed in recognition of the legal requirement on the local authority to achieve and maintain Air Quality Objectives under Part IV of the Environment Act 1995, as amended by the Environment Act 2021, and to meet the requirements of the Local Air Quality Management (LAQM) statutory process.

This Plan will be reviewed every five years at the latest and progress on measures set out within this Plan will be reported on annually within Lewes's air quality ASR.

2 Summary of Current Air Quality in Lewes District Council

2.1 Air Quality Management Areas

The relevant Air Quality Management Areas (AQMAs) addressed by this AQAP are outlined below.

Table 2.1 Relevant Declared Air Quality Management Areas

AQMA Name	Date of Declaration	Pollutants and Air Quality Objectives	One Line Description	Is air quality within the AQMA influenced by National Highways roads?	Level of Exceedance: Declaration	Level of Exceedance: Current Year	Number of Years Compliant with Air Quality Objective
Lewes Town Centre AQMA	Declared 30/06/2005	Nitrogen dioxide (NO_2) Annual Mean	An area encompassing a section of Lewes Town Centre extending north to include the Police Station, south to St Andrews Place.	NO	53 µg/m^3	29.7 µg/m^3 *	4 years **
A259 Newhaven Ring Road AQMA	Declared 16/07/2014	Nitrogen dioxide (NO_2) Annual Mean	The designated area incorporates Newhaven Town Centre, Southway, Northway, and sections of the A259 Brighton Road, Lewes Road and the swing bridge.	NO	49 µg/m^3	38.2 µg/m^3	Not compliant

* There is an exceedance recorded close to Lewes Town Centre AQMA at monitoring site 21. Monitoring site 21 is currently under review as localised sources may have affected monitoring data so as to make results unreliable. Further details are provided in section 6.3.

** Number of years compliant includes 2020 and 2021, which are likely anomalies due to the impact of the COVID-19 pandemic and nationally imposed lockdowns on emissions. Excluding anomalous years, this is the first year that the AQMA have been compliant with the Air Quality Objective.

2.1.1 Lewes Town Centre AQMA

The Lewes Town Centre AQMA was declared in 2005 due to exceedances of the NO_2 annual mean AQS Objective. The NO_2 annual mean concentration of 53 µg/m^3 was recorded within the Lewes Town Centre AQMA at declaration, which exceeded the 40 µg/m^3 AQS Objective by 13 µg/m^3. The Lewes Town Centre AQMA encompasses a section of Lewes Town Centre extending north to include the Police Station, south to St Andrews Place.

There are seven diffusion tube sites within this AQMA, five diffusion tube sites adjacent to this AQMA and two continuous monitoring sites within this AQMA (one continuous monitoring site LS5 has been decommissioned since 2022). Annual mean NO_2 concentrations from these sites are presented in Table 2.2. Exceedance of the AQS Objective was reported in 2019 at Site ID 12 and Site ID 21. Annual mean NO_2 concentrations at all locations within the AQMA has achieved compliance since 2020 for four consecutive years.

However, one monitoring location (Site ID 21) which is on the High Street, not within the Lewes Town Centre, recorded an exceedance of 45.7 µg/m^3 in 2023. This had been considered to be impacted by a boiler outlet pipe and hence not representative of the local air quality however the tube has been relocated and initial review for 2024 data continues to show an exceedance. Further analysis is necessary to determine whether the AQMA needs to be extended to cover the High Street area.

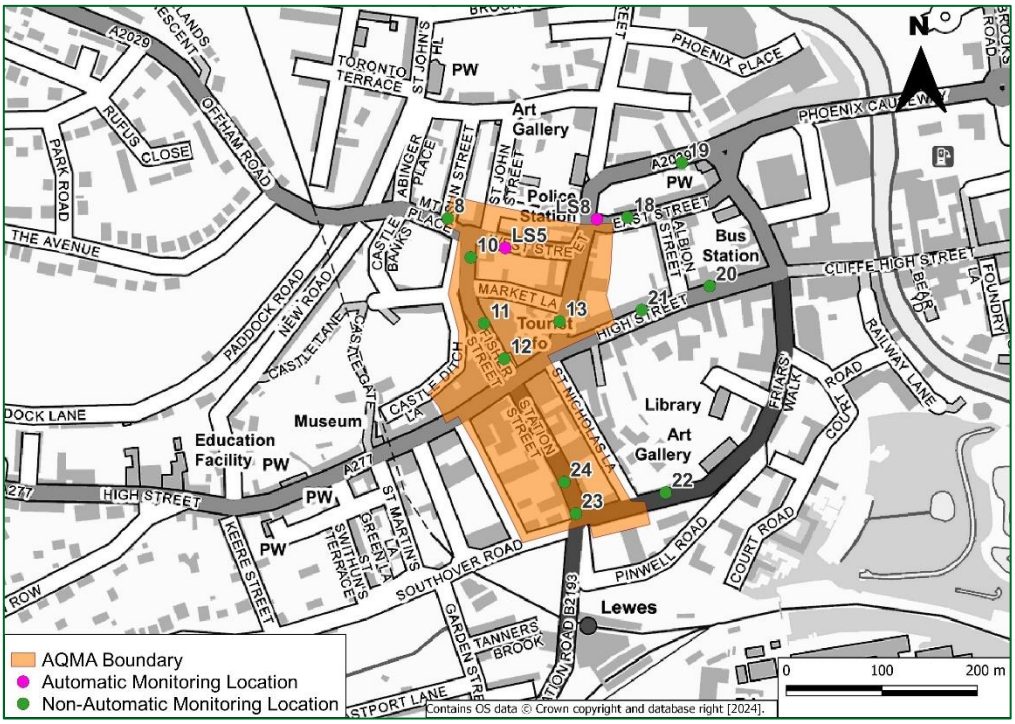
The locations of these monitoring sites are illustrated in Figure 2.1.

Table 2.2 Lewes Town Centre AQMA Annual Mean NO_2 Concentrations

Site ID	Site Location	In AQMA	Annual Mean NO_2 Concentration (µg/m^3)				
			2019	2020	2021	2022	2023
LS5	Lewes Town West Street	Yes – Lewes Town Centre AQMA	19	16	14.7	-	-
LS8	Little East Street	Yes – Lewes Town Centre AQMA	-	-	-	13.8	13.5
8	LDC 26 - Mount Pleasant/Sun Street	Yes – Lewes Town Centre AQMA	23.7	14.9	18.0	16.0	17.3
10	LDC 18 - Fisher Street	Yes – Lewes Town Centre AQMA	24.1	15.5	16.8	17.4	17.0
11	LDC 36 - Fisher St West	Yes – Lewes Town Centre AQMA	32	20.6	24.1	32.4	23.0
12	LDC 1 - Fisher St East	Yes – Lewes Town Centre AQMA	**41.9**	27.6	30.0	29.3	29.7
13	LDC 29 - Market St	Yes – Lewes Town Centre AQMA	36.8	27.9	26.5	22.5	28.3

18	LDC 6 East Street	No - adjacent to AQMA	23.2	15.3	17.0	16.8	17.2
19	LDC 30 - Little East St	No - adjacent to AQMA	21.4	14.1	15.5	14.5	13.7
20	LDC 45 - School Hill	No - adjacent to AQMA	38.5	27.6	29.4	27.9	32.7
21	LDC 34 - 204 High St (School Hill)	No - adjacent to AQMA	**43.6**	31.6	33.0	35.3	**45.7**
22	LDC 35 - Walmer Lane/Lansdowne Terrace	No - adjacent to AQMA	20.4	13.5	14.8	12.7	13.0
23	LDC 23 - Station St/Lansdowne Terrace	Yes – Lewes Town Centre AQMA	24.7	16.1	19.1	17.7	18.6

Figure 2.1 Location of Monitoring Sites within Lewes Town Centre AQMA



2.1.2 A259 Newhaven Ring Road AQMA

The A259 Newhaven Ring Road AQMA was declared in 2014 due to exceedances of the NO_2 annual mean AQS Objective. The NO_2 annual mean concentration of 49 $\mu g/m^3$ was recorded within the Lewes Town Centre AQMA at declaration, which exceeded the 40 $\mu g/m^3$ AQS Objective by 9 $\mu g/m^3$. The A259 Newhaven Ring Road AQMA incorporates Newhaven Town Centre, Southway, Northway, and sections of the A259 Brighton Road, Lewes Road and the swing bridge.

There are six diffusion tube sites within this AQMA, two diffusion tube sites adjacent to this AQMA and one continuous monitoring sites within this AQMA (decommissioned since 2022). Annual mean NO_2 concentrations from these sites are presented in Table 2.3. Exceedance of the AQS Objective was reported in 2019 at Site ID 3, 40 and 50. Monitoring Locations Site ID 3 recorded exceedance of the

annual mean AQS objective for NO_2 in 2022 as well, and recorded concentration within 10% of the exceedance value in 2021 and 2023.

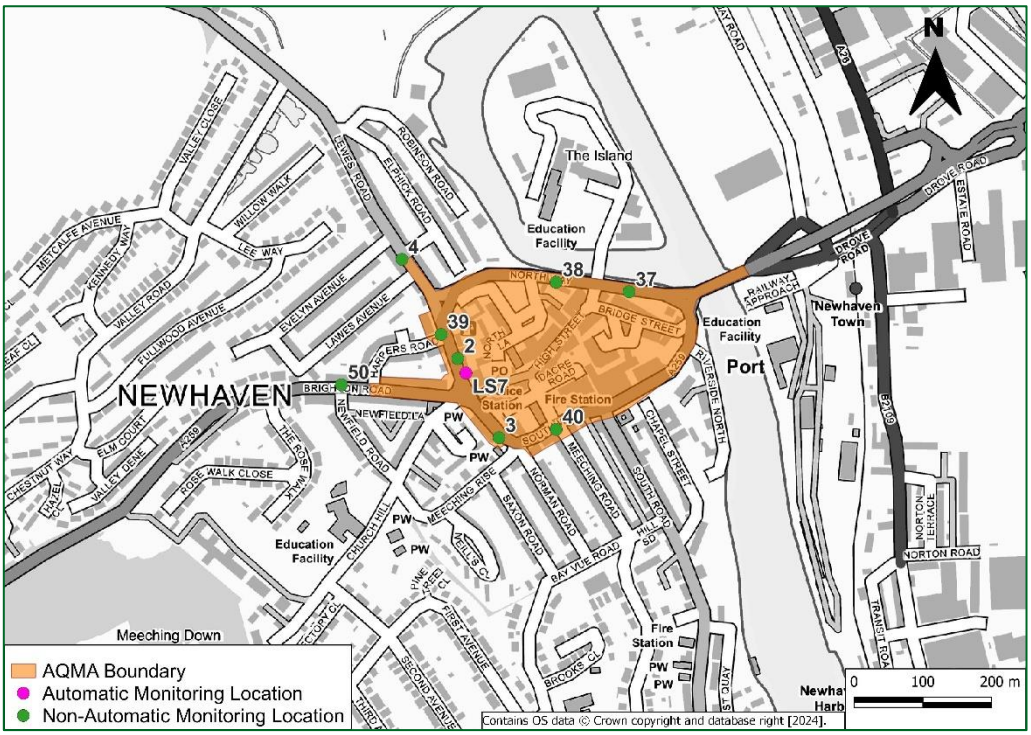
All monitored sites reported lower concentrations in 2020 and 2021 compared with previous years under the impact of lockdown during the COVID-19 pandemic. However, an upwards trend has been observed from the monitored data from 2022 to 2023 at Site ID 3, 13, 20, 21 and 24 due to the emissions from increasing traffic flows recovering from the impact of lockdown. The monitoring results at other sites remain at the low level from 2022 to 2023.

The locations of these monitoring sites are illustrated in Figure 2.2.

Table 2.3 A259 Newhaven Ring Road AQMA Annual Mean NO_2 Concentrations

Site ID	Site Location	In AQMA	Annual Mean NO_2 Concentration ($\mu g/m^3$)				
			2019	2020	2021	2022	2023
LS7	Lewes Road, Newhaven	Yes – Newhaven AQMA	-	21	23.6	-	-
2	LDC 10 - 9 Southway – Newhaven	Yes - A259 Newhaven Ring Road AQMA	33.4	24.2	28.5	28.1	23.2
3	LDC - 16 Southway – Newhaven	Yes - A259 Newhaven Ring Road AQMA	**40.7**	31.6	36.9	**41.3**	38.2
4	LDC 11 - Lewes Rd – Newhaven	No - adjacent to AQMA	30.7	22	24.3	23.4	21.2
37	Newhaven - Bridge Pub	Yes - A259 Newhaven Ring Road AQMA	39.2	28.7	28.8	30.7	26.6
38	Newhaven- Essex Place	Yes - A259 Newhaven Ring Road AQMA	30.7	21.5	24.0	25.1	17.1
39	Newhaven - Rathan Court	Yes - A259 Newhaven Ring Road AQMA	27.1	19.9	21.8	22.4	20.2
40	Newhaven - The Old Chapel	Yes - A259 Newhaven Ring Road AQMA	**44.6**	34.1	35.8	33.7	34.5
50	O/S 64 Brighton Rd	No - adjacent to AQMA	**42.6**	25.8	29.1	29.1	27.7

Figure 2.2 Location of Monitoring Sites within A259 Newhaven Ring Road AQMA



2.2 Public Exposure

To understand the population exposed to poor air quality, a review of the estimated population of each AQMA has been undertaken. This has been completed using the Office for National Statistics 'Lower Super Output Area' (LSOA) information. Information from the Indices of Multiple Deprivation (IMD) are also included. The number for the IMD are based on deciles of multiple factors of deprivation. The larger the score, the more deprived the area.

Table 2.4 below shows that the A259 Newhaven Ring Road AQMA has higher population than the Lewes Town Centre AQMA. This could suggest potentially greater exposure to air pollution in the A259 Newhaven Ring Road AQMA.

Compared with Lewes Town Centre AQMA, Newhaven AQMA has a much lower average IMD decile. This may indicate increased vulnerability to the effects of air pollution due to higher levels of deprivation within Newhaven AQMA.

The median age of the population is 48 for the whole Lewes area, compared with 40 for England. The Lewes Town Centre AQMA has a slightly younger population than the regional population. The Newhaven Ring Road AQMA has a younger population

than both the regional population and national population. This age distribution can influence the susceptibility of these populations to the impact of air quality, with older age groups potentially being more vulnerable.

Table 2.4 Population and IMD

AQMA	Estimated Population in AQMA	Average IMD within AQMA	Median Age
Lewes Town Centre AQMA	99	8	47
A259 Newhaven Ring Road AQMA	569	3	36

3 Lewes District Council's Air Quality Priorities

3.1 Public Health Context

Mounting scientific evidence shows the scale of the impact of poor ambient air quality on health. Research shows that the most common air pollutants of concern, NO_2, PM_{10} and $PM_{2.5}$ (particulate matter in the fractions of less than 10 microns and 2.5 microns in diameter), are linked to various health complications, impacting the cardiovascular and respiratory systems. Exposure to these pollutants can bring about symptoms such as nose and throat irritation, followed by bronchoconstriction and dyspnoea, alongside increasing reactivity to natural allergens, increasing the risk of respiratory infections through the pollutants interaction with the immune system[4], and may lead to reduced lung function.

Alongside this, there is increasing interest and pressure from members of public for Local Authorities to actively tackle and reduce air pollution in their areas. Previously, there had been no deaths officially linked to air pollution, however in 2020 the first person in the UK had 'air pollution' listed as a cause of death. Although currently there are no legislative outcomes as a result of this, this further increases the pressure and duty of care that Local Authorities have in order to protect their residents. Poor air quality is considered to be a significant contributory factor to the loss of life, shortening lives by an average of 5 months. In 2010, the Department of Health's Committee on the Medical Effects of Air Pollutants (COMEAP) reported that long-term exposure to outdoor air pollution contributes to the equivalent of 29,000 deaths in 2008 in the UK, and an associated loss to the population of 340,000 life-years. A further report by the Royal College of Physicians reported in 2016 that it contributed to the equivalent of 40,000 deaths in 2015. A recently updated guidance published by Office for Health Improvement and Disparities[5] concluded that the

[4] Marilena Kampa and Elias Castanas, Human Health Effects of Air Pollution, June 2007

[5] Guidance - Air pollution: applying All Our Health, updated February 2022. Available: https://www.gov.uk/government/publications/air-pollution-applying-all-our-health/air-pollution-applying-all-our-health

annual mortality of human-made air pollution in the UK is roughly equivalent to between 28,000 and 36,000 deaths every year. It is estimated that between 2017 and 2025 the total cost to the NHS and social care system of air pollutants (fine particulate matter and nitrogen dioxide), for which there is more robust evidence for an association, will be £1.6 billion.

Local authorities have a range of powers which can effectively help to improve air quality. However, the involvement of public health officials is crucial in playing a role to assess the public health impacts and providing advice and guidance on taking appropriate action to reduce exposure and improve the health of everyone within Lewes District Council.

The Air Quality Indicator in the Public Health Outcomes Framework (England) provides further impetus to join up action between the various local authority departments which impact on the delivery of air quality improvements. The “Air Quality – A Briefing for Directors of Public Health” document published in March 2017 provides a one-stop guide to the latest evidence on air pollution, guiding local authorities to use existing tools to appraise the scale of the air pollution issue in its area. It also advises local authorities how to appropriately prioritise air quality alongside other public health priorities to ensure it is on the local agenda.

The document comprises the following key guides:

- Getting to grips with air pollution – the latest evidence and techniques;
- Understanding air pollution in your area;
- Engaging local decision-makers about air pollution;
- Communicating with the public during air pollution episodes;
- Communicating with the public on the long-term impacts of air pollution; and
- Air Pollution: an emerging public health issue: Briefing for elected members.

The Guidance on improving outdoor air pollution and health: review of interventions[6] published in March 2019 provides a review of interventions and in-depth evidence for a range of practical interventions to reduce harm from outdoor air pollution.

Besides NO_2, there is an increasing focus on fine particulate matter. Particulate matter which is 2.5 microns or less in diameter and known as $PM_{2.5}$ is a pollutant of concern. Neither AQMA has been declared for $PM_{2.5}$ and the modelling as part of the detailed assessment has shown predicted levels below the annual mean objective of 25 µg/m³. Whilst there are legal limits in place to protect human health it is recognised that there are no absolutely safe levels of $PM_{2.5}$. Negative health impacts associated with $PM_{2.5}$ exposure have been found well below current EU and UK limits.

The Public Health Outcomes Framework data tool[7] compiled by Public Heath England quantifies the mortality burden of $PM_{2.5}$ within England on a county and local authority scale. The 2022 fraction of mortality attributable to particulate air pollution across England is 5.8%. The fraction within Lewes District Council at 3.7% is significantly lower than the national average and the South East regional average of 5.7%.

It should be noted that this figure only accounts for one pollutant ($PM_{2.5}$) for which stronger scientific evidence on links with mortality exist, and not NO_2, for which the AQMAs are declared, so the true figure is possibly even higher. NO_2 has also been associated with adverse health effects at concentrations that were at or below current EU and UK limit values. Furthermore, following on from a review of research into the death burden associated with the air pollution mixture rather than single pollutants acting independently, COMEAP are currently reviewing the ability to link deaths to one specific pollutant.

It is expected that some of the measures implemented within this action plan for the achievement of reductions in NO_2 will have co-benefits in additionally reducing concentrations of PM_{10} and $PM_{2.5}$.

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[6] Guidance on improving outdoor air quality and health: review of interventions. Published March 2019. Available online at https://www.gov.uk/government/publications/improving-outdoor-air-quality-and-health-review-of-interventions

[7] Public Health Outcomes Framework, Public Health England. data tool available online at https://fingertips.phe.org.uk/profile/public-health-outcomes-framework/data#page/0/gid/1000043/pat/6/par/E12000008/ati/202/are/E06000036/cid/4/page-options/ovw-do-0

This action plan is aimed at improving air quality and achieving compliance within the AQMAs in Lewes. However, it is important to highlight that if there is not an AQMA in place, it does not mean there is not a public health concern around air quality.

3.2 Planning and Policy Context

There are a number of related policies and strategies at the local and regional level that can be tied in directly with the aims of the AQAP. The majority of these policies and strategies are focused on development planning and transportation issues and are therefore likely to help contribute to overall improvements in air quality across the LDC area. The review of these strategies and policies assists in preventing duplication of work within the AQAP and can instead work in concordance for mutual benefit whilst also focusing on direct measures outside those considered within the already developed strategies and policies. This section outlines the strategies and policies that have the most significant potential to impact on pollutant concentrations within LDC. The most relevant policies and strategic documents are detailed below.

3.2.1 Clean Air Strategy 2019 and Air Quality Strategy 2023

The UK government has published key strategies to improve air quality nationwide, including the Clean Air Strategy 2019 and Air Quality Strategy 2023. These set out actions to reduce emissions from major sources like road transport, industry and agriculture. Key measures include ending sales of new petrol/diesel cars by 2040, encouraging cleaner transport modes, and setting new emissions standards. The 2023 strategy provides a framework for local authorities to deliver air quality improvements, focusing on $PM_{2.5}$, NO_x and ammonia. It emphasizes treating air quality as a public health issue and encourages collaboration between public health, climate change and other relevant departments in developing local air quality plans and strategies.

3.2.2 South Downs Local Plan

The South Downs Local Plan[8] was adopted 2 July 2019 and covers the entire National Park. The Local Plan has been informed by a range of factors relating to the special qualities of the National Park, including landscape character, biodiversity and cultural heritage of the National Park, Neighbourhood Plans, local housing and economic needs and the impact of climate change. The core policies set out the framework for evaluating all development proposals in the National Park which is also relevant to the air quality and its impact to the local area. The relevant core policies are listed below.

Core Policy SD1: Sustainable Development sets out that:

"3. When determining any planning application, the Authority will consider the cumulative impacts of development.

4. Planning permission will be refused where development proposals fail to conserve the landscape, natural beauty, wildlife and cultural heritage of the National Park unless, exceptionally:

a) The benefits of the proposals demonstrably outweigh the great weight to be attached to those interests; and

b) There is substantial compliance with other relevant policies in the development plan."

Core Policy SD2: Ecosystem Services sets out that:

" 1. Development proposals will be permitted where they have an overall positive impact on the ability of the natural environment to contribute goods and services. This will be achieved through the use of high quality design, and by delivering all opportunities to:

[…](i) Reduce levels of pollution;

(j) Improve opportunities for peoples' health and wellbeing; […]

2. Development proposals must be supported by a statement that sets out how the development proposal impacts, both positively and negatively, on ecosystem services."

Core Policy SD3: Major Development sets out that:

"1. In determining what constitutes major development the National Park Authority will consider whether the development, including temporary events should they be deemed to constitute development, by reason of its scale, character or nature, has the potential to have a significant adverse impact on the natural beauty, wildlife or cultural heritage of, or recreational opportunities provided by, the National Park. The

[8] South Downs Local Plan, adopted 2 July 2019. Available at: https://www.southdowns.gov.uk/planning-policy/south-downs-local-plan/local-plan/

potential for significant adverse impact on the National Park will include the consideration of both the impact of cumulative development and the individual characteristics of each proposal and its context.

2. Planning permission will be refused for major developments in the National Park except in exceptional circumstances, and where it can be demonstrated they are in the public interest. Consideration of such applications should include an assessment of: […]

c) Any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated […]"

3.2.3 Lewes Core Strategy: Local Plan

The Core Strategy[9] was adopted by Lewes District Council on 11 May 2016. The Core Strategy is Lewes District Council's central planning policy document for the Lewes district, outside of the South Downs National Park. It sets out the long-term spatial vision for the district and will guide development and change up to 2030. It is an important document to consider when developing the AQAP as it sets out the relevant air quality core policy for the council. The core policies within the plan that specifically address air quality are as follows:

"Core Policy 9 – Air Quality

Key Strategic Objective:

- *To reduce the need for travel and to promote a sustainable system of transport and land use for people who live in, work in, study in and visit the district.*
- *To ensure that the district reduces locally contributing causes of climate change and is pro-active regarding climate change initiatives.*

The local planning authority will seek to improve air quality, having particular regard to any Air Quality Management Area (AQMA) designations.

Applications for development that by virtue of their location, nature or scale could impact on an AQMA will be required to:

1. Have regard to any relevant Air Quality Action Plans (AQAP) and to seek improvements in air quality through implementation of measures in the AQAP.

2. Provide mitigation measures where the development and/or associated traffic would adversely affect any declared AQMA.

All applications for development will be required to:

[9] Lewes Core Strategy: Local Plan. Adopted on 11 May 2016. Available at: https://www.lewes-eastbourne.gov.uk/media/1718/Adopted-Joint-Core-Strategy-2016/pdf/Adopted_Joint_Core_Strategy_2016.pdf?m=1682440920647

3. Provide mitigation measures where the development and/or its associated traffic could lead to a declaration of a new or extended AQMA.

4. Ensure that the development will not have a negative impact on the surrounding area in terms of its effect on health, the natural environment or general amenity, taking into account cumulative impacts.

5. Promote opportunities for walking, cycling and public transport and congestion management to reduce traffic levels in areas of reduced air quality, particularly in town centre locations, and promote the opportunity for cycling through the provision of cycleways.

6. Secure best practice methods to reduce levels of dust and other pollutants arising from the construction of development and/or from the use of the completed development."

"Core Policy 13 – Sustainable Travel

7.117 Transport issues remain a major concern for many local people. The rate of road casualties in the district is above the national average and 43% of residents in the Place Survey 2008 identified traffic congestion as a priority issue that needs to be addressed. An Air Quality Management Area has been declared in Lewes town centre, where most of the air pollution is generated by traffic. Levels of nitrogen dioxide in Newhaven town centre are also close to the national limits. On the A27, traffic levels are expected to reach capacity in the near future, particularly west of the Ashcombe Roundabout where the Highways Agency is forecasting 'highly stressed' road conditions by 2026.

7.118 Growth in the number and distance of journeys made by private car will therefore increasingly conflict with the local planning authority's aspirations for environmental enhancement, economic growth, and a better quality of life for residents. At the same time, accessibility issues for the district's rural communities are widely recognised, in particular the needs of the elderly, the disabled and young people in terms of accessing employment, education, health and entertainment facilities. The limited availability and frequency of public transport in the rural areas of the district has been identified as a key issue. Additionally, people on lower incomes are more likely to be reliant on public transport to access jobs and services.

7.119 An integrated approach to transport provision is therefore required to ensure that travel demand is managed in an effective and sustainable way, and that major new developments help to enhance travel choices and mitigate any adverse impacts they may otherwise have on the district's transport network. The local planning authority will work in partnership with East Sussex County Council, the local transport authority, to agree joint transport priorities in order to achieve these outcomes."

3.2.4 Towards a Lewes Local Plan: Spatial Strategy and Policy Directions

Lewes District Council is preparing a new Local Plan[10] with the aim of providing the planning framework for the plan area to 2040. The new Local Plan will help to make

[10] Towards a Lewes Local Plan: Spatial Strategy and Policy Directions. Draft Version 2024. Available at: https://planningpolicyconsult.lewes-eastbourne.gov.uk/LDC_PO_2023/consultationHome

sure that our plan area provides the homes, jobs, community facilities and services to meet the needs of people living, working in and visiting the plan area in a sustainable manner. The new Local Plan is expected to be adopted in 2026.

The draft Local Plan presents the below core policies to address air quality within the council:

Policy D5: Public Realm

[…] The effects of traffic can have a significant impact on the quality of the public realm in terms of air quality, noise and amenity of a space. The negative effects of traffic should be minimised to ensure people's enjoyment of public realm is maximised.

Policy NE4: Clean and Healthy Environment

Objectives: This policy will set out how development should contribute positively to the quality of the environment and how development should minimise polluting impacts on existing and future residents to create a clean and healthy environment for all.

The policy addresses pollution such as air, soil, noise, and light (the dark night sky), and includes specific requirements where appropriate for each where relevant. Pollution in the watercourse is considered in the Water Theme.

The policy will require all development proposals to:

- avoid significant adverse impacts on health and the quality of life for residents and quality of the environment from pollutants such as air, soil, noise, and light (the dark night sky) or other pollutants now or in the future;
- mitigate any adverse impact on the health and quality of life for residents and quality of the environment from pollutants;
- and where possible contribute to the improvement of mentioned quality aspects to help improve health, quality of life and the environment.

Development (residential and commercial) that may potentially contribute to, or adversely affect soil quality, air quality, or contribute to noise or light pollution will only be permitted where it can be demonstrated that the development will not have an adverse impact on the use of other land, the health and quality of life of residents, or on the environment.

Specific for air pollution: the local plan will set out requirements for sustainable travel. Developments that support or encourage travel by walking, cycling and public transport, reducing the need to travel by private car will be supported[11]. The environment policy will set out specific requirements for development that could impact current or potential AQMAs and will address reduction of pollutants in the construction phase. Development proposals which could impact on a current or potential AQMA must have regard to any relevant AQAPs and seek improvements in air quality through implementation of measures in the AQAP; and provide mitigation measures where the development and/or associated traffic would adversely affect any declared AQMA. All applications for development will be required to secure best practice methods to reduce levels of dust and other pollutants arising from the construction of development and/or from the use of the completed development. The policy will set out requirements for applications in terms of submission of construction details if known to avoid conditions.

3.2.5 Local Transport Plan 4 - Fourth East Sussex Local Transport Plan

The fourth East Sussex Local Transport Plan 2024 – 2050 (also known as LTP4)[12] was adopted at Full Council on 8 October 2024. LTP4 sets out how East Sussex County Council and partners will plan and provide transport for residents, businesses and visitors in East Sussex now and for future generations, to help connect them with the places they need to go on a daily basis.

It sets out how The County Council and partners plan to:

- enable safer and more accessible journeys.
- develop healthy places to enable people to live well.
- decarbonise transport to help achieve net zero targets by 2050 at the latest.
- maintain and strengthen transport networks so that they are resilient.
- support a more equitable, inclusive, and sustainable economy within coastal towns, market towns and villages in more rural areas.

[11] See also sustainable travel policy.

[12] Local Transport Plan 4 - Fourth East Sussex Local Transport Plan. Adopted on 8 October 2024. Available at: https://www.eastsussex.gov.uk/roads-transport/transport-planning/local-transport-plan/local-transport-plan-4

Within the Local Transport Plan, Policy B5: Air Quality sets out below component policy measures:

- Investigating the potential for traffic management schemes in the centres of largest urban areas.
- Reducing the need to travel by higher polluting transport modes through better, integrated spatial and transport planning.
- Promoting less polluting forms of travel (for example, active travel, public transport, and electric vehicles) for people and goods movement.
- Assisting local planning authorities in the development and implementation of Air Quality Strategies and Action Plans to ensure agreed targets are met.
- Harnessing improvements to vehicle technology, including the use of ultra-low and zero emission vehicles and fuels.
- Further developing the County Council's School Streets programme to restrict vehicle access outside schools at drop off and pick-up times, thereby reducing levels of pollutants in their vicinity.
- Working with partners and communities to co-develop, seek funding and deliver travel behaviour change programmes, to support walking, wheeling and cycling.

There are other strategies and plans, focusing on specific modes of transport, that support the Local Transport Plan including the Local Cycling & Walking Infrastructure Plan, the Bus Service Improvement Plan (BSIP) and the Rail Development Strategy which are listed below.

3.2.6 Local Cycling & Walking Infrastructure Plan

The East Sussex Local Cycling and Walking Infrastructure Plan (LCWIP)[13] sets out proposed cycling and walking networks and measures within specific areas of the County.

The LCWIP focuses on areas of the County where there are the greatest opportunities to increase levels of cycling and walking. There is an emphasis on delivering infrastructure improvements which supports people who do not cycle or walk.

The plan specifies in paragraph 3.7 that:

[13] Local Cycling & Walking Infrastructure Plan. Published October 2020. Available at: https://www.eastsussex.gov.uk/roads-transport/cycling-walking-cycling-plans/cycling-walking-infrastructure-plan

"Exposure to poor air quality is not a lifestyle choice and often affects the health of people who are more vulnerable, including children and people with pre-existing health conditions, as well as those people that live or work nearer to congested roads. Initiatives to encourage more people to walk and cycle, particularly on the commute to work or to access education, is therefore important. Not only will this reduce congestion from vehicles on the road, thereby lowering toxic emission levels locally, but it will improve the physical health and wellbeing of people locally. This is especially important in our air quality management areas (AQMAs) within Newhaven and Lewes (both of which are managed by Lewes - Eastbourne – Council)."

3.2.7 Bus Service Improvement Plan (BSIP)

The East Sussex Bus Service Improvement Plan (BSIP)[14] sets out the plans and supporting policies to improve bus services in the area, working in close cooperation with the neighbouring Local Transport Authorities and with stakeholders representing local bus operators, statutory consultees, community and business voices, bus passengers, and the voluntary and health transport sectors.

The mission set out in the plan is to ensure that East Sussex residents and visitors enjoy the highest possible quality bus services that provide:

- A frequent and comprehensive choice.
- Reduce congestion.
- Make a positive contribution to better air quality and decarbonisation.

The BSIP covers a number of key service enhancements which will benefit the residents of East Sussex; coupled with infrastructure and other interventions such as more effective parking controls, enhanced bus priority and a fresh look at fares and ticketing – especially improving existing discount offers for young people - this will move the bus up the hierarchy and lead to transformational modal shift which in turn will lead to fewer car journeys, reduced congestion and improved air quality.

[14] Bus Service Improvement Plan (BSIP). Published October 2021. Available at: https://www.eastsussex.gov.uk/roads-transport/public/bus-service-improvement-plan/bus-service-improvement-plan-for-east-sussex-county-council

3.2.8 Rail Development Strategy

The East Sussex Rail Development Strategy[15] was approved by the Lead Member for Economy (ESCC) in November 2013. The Strategy has been used to influence rail investment decisions in East Sussex.

The improvement of the rail network and services helps encourage people to use the public transport and therefore reduce car journeys and emissions and improve air quality.

3.2.9 Lewes Neighbourhood Plan

A Neighbourhood Plan for Lewes was adopted as policy in April 2019, by the planning authority for Lewes Town – South Downs National Park Authority. This plan is based upon contributions of visitors to the exhibitions and workshops over four years, and the work done by the community representatives who formed the steering group during that period. Policies on themes such as transport and protection of the town's heritage; potential sites for new homes and ideas for design, with supporting arguments, were refined in light of the comments following various periods of consultation etc. The plan is also consulted with statutory bodies such as Lewes District Council; East Sussex County Council; South Downs National Park Authority; the Environment Agency; Natural England; Historic England and others.

The relevant policy which will help improve the air quality in the area is listed below:

Policy AM3 Car Parking Strategy

New developments across the plan area will be supported where they have regard to and safeguard strategic car parking projects in the neighbourhood area.

This policy will particularly apply to:

- The rationalisation of surface car parks across the town to create an easy to understand system for residents and visitors.
- Improvements to air quality and reducing congestion.

[15] Rail Development Strategy. Available at: https://www.eastsussex.gov.uk/roads-transport/transport-planning/local-transport-plan/rail/rail-development-strategy

- Supporting greater use of electric vehicles, more charging points of established regular standards for residents and visitors.
- Giving support to the Car Club network.

3.2.10 Lewes Integrated Movement Strategy

The Lewes Integrated Movement Strategy emerged from the Transport Season of the Lewes Climate Hub held in 2023. A 'movement strategy' is a plan that considers the needs of all transport users including pedestrians, wheelers, cyclists and bus and rail users and follows the transport hierarchy which places those road users most at risk in the event of a collision at the top of the hierarchy[16].

Lewes Town Council is leading this project and Lewes District Council is a member of the Task and Finish Group, with the following terms of reference:

"To develop and agree an 'integrated active travel strategy for Lewes as a supplementary document in our Neighbourhood Plan'."

East Sussex County Council and South Downs National Park Authority are consultees.

Outcomes from the phased implementation of the Strategy will include:

- Increased footfall and dwell-time in the town to benefit local businesses
- People-centred mobility services available to all
- Reduced need for private car ownership to save people money
- Improved air quality
- Reduced noise
- Improved public space and cultural heritage
- Links to green and blue space fit for an historic town in a national park

Funding secured by Cycle Lewes from Ouse Valley Climate Action has been utilised to procure specialist support for technical analysis and development of strategic design principles. Traffic volumes, key routes and pinch points have been identified in order to help identify opportunities and challenges as well as possible mitigations.

[16] https://www.gov.uk/guidance/the-highway-code/introduction

This work is currently being assessed with a view to developing options for implementation, after a planned consultation later this year.

3.2.11 Newhaven Neighbourhood Development Plan

The Newhaven Neighbourhood Development Plan (NDP) was adopted on 14 November 2019 as a result of the South Downs National Park Authority (SDNPA) Planning Committee resolution.

On adoption, the Newhaven Neighbourhood Plan will become part of the Statutory Development Plan along with the Lewes District Local Plan Part 1: Joint Core Strategy 2010 - 2030, Local Plan Part 2 (when adopted) and the South Downs Local Plan and will guide development in Newhaven up to 2030. What this means is that Lewes District Council and the South Downs National Park Authority (SDNPA) will consult the plan and use the planning policies within it, to determine whether to grant planning permission for planning applications made within the Neighbourhood Plan Area.

The relevant policy which will help improve the air quality in the area is listed below:

Policy T 1 – Congestion mitigation and sustainable movement

1. Planning applications will be supported which improve sustainable movement throughout the plan area to reduce traffic impacts and improve air quality.

2. Planning applications for new development which seek to minimise traffic impacts on the environment and improve air quality, including the provision of cycle storage, car sharing, and electric car charging points will be supported.

3. Where possible, new development should encourage walking and cycling by the inclusion of pedestrian and cycle links to existing access network and areas of public access.

4. New development should, where appropriate, contribute towards the provision or improvement of cycle and pedestrian routes throughout and connections with the town to include links to the South Downs National Park, railway stations, bus stops and subway enhancements to encourage their use and improve cross town links.

5. Proposals which will lead to significant increased traffic flows or congestion should take proportionate steps through legal agreements to mitigate traffic impacts.

Mitigation may include a range of approaches such as: a) Upgrading pedestrian crossing equipment including phasing b) Pedestrian and traffic signal enhancements (linking) c) Junction improvements.

6. To improve sustainable movement between the east and west sides of the town, a new moving pedestrian/cycle bridge over the River Ouse of exemplary design will be supported.

3.2.12 Re-Imagining Newhaven Programme

The Re-imagining Newhaven programme is being delivered with £37 million of capital grant funding to deliver 13 projects in Newhaven by March 2026 including:

- Refurbishment of the Newhaven Ferry Terminal to re-establish Newhaven as a key strategic gateway to the UK will incorporate new facilities and provide a better visual and more pleasant experience for passengers using the Newhaven Ferry service. It will increase the number of foot passengers using the cross-channel ferry service between Newhaven and Dieppe and new cycle stands will help encourage cyclists through the Port.
- A new pedestrian crossing in a key nodal point will link the train station, bus stop, and taxi rank to the Ferry Terminal.
- A new fish processing plant will enable fish landed in Newhaven to be processed, stored and distributed from the site.
- Improvements at Fort Road Recreation Ground will include the redesign of existing buildings, landscaping, including new trees, native hedging, pathways and the development of a new play area and outdoor fitness trail.
- Multiple projects to restore and enhance Newhaven Fort, which is a Scheduled Monument, so that it becomes a community asset and a key part of Newhaven’s future as a popular visitor destination, encouraging local engagement and tourism, and potentially reducing the need for long-distance travel for recreation.

- Newhaven Square investment aims to transform empty underutilised properties in the heart of the town including a green wall which is proposed to

the east elevation of the former Co-op and the north elevation of Dacre Road car park. The transformation will in turn will increase footfall, dwell time and spend, to create a thriving and sustainable town centre.

- Newhaven Wayfinding and Public Realm Improvements will connect key attractions, transport hubs and destinations within Newhaven by:
- Enlarging the scale of the public realm whether physically accessible or not to improve spatial definition and generosity for active travel users.
- Providing dignified pedestrian access to the major public institutions alongside the south of the site.
- Delineating a legible and engaging walking route between the train station and the river.
- Reducing the dominance of vehicular infrastructure, enhancing biodiversity and making space for people through relandscaping of the existing interchange and Railway Quay
- Planting (integrated with SUDS) to provide visual appeal, a buffer for vehicles and will break the pathway between emission source and receptor

3.3 Source Apportionment

The AQAP measures presented in this report are intended to be targeted towards the predominant sources of emissions within Lewes District Council's area. Where road transport is identified as the principal source of emissions, the relative contributions from different vehicle types (e.g. cars, Heavy Good Vehicles (HGVs), Light Goods Vehicles (LGVs), and buses) can be determined to identify which vehicle type represents the most significant source of pollution.

A source apportionment exercise was carried out by Lewes District Council in 2022 using an air dispersion model to assess the overall emissions profile of vehicles moving through the AQMAs. Source apportionment was carried out for each AQMA separately.

Emission sources of NO_2 are dominated by a combination of direct NO_2 (f-NO_2) and oxides of nitrogen (NO_x), the latter of which is chemically unstable and rapidly oxidised upon release to form NO_2. Reducing levels of NO_x emissions therefore reduces levels of NO_2. As a consequence, the source apportionment study has considered the emissions of NO_x which are assumed to be representative of the main sources of NO_2. Both the source apportionment of NO_x and the source apportionment of the equivalent NO_2 are presented for reference

The methodology to achieve this involves dispersion modelling of road traffic emissions. Traffic data inputs were supplied by the appointed transport consultants and supplemented by DfT road traffic statistics. The Emissions Factors Toolkit (EFT) version 12.0.1 developed by Defra[17] was used. Road-NO_x contributions for each source type at receptor locations were then modelled using Cambridge Environmental Research Consultants ADMS-Roads™ dispersion model (version 5.0.0.1).

Background pollutant concentrations, as derived for the area from UK-Air, have been added to the ADMS-Roads modelled road source output to calculate predicted total annual mean concentrations of NO_x and NO_2. For each location the total NO_x from all vehicle classes as well as the percentage attributable to background sources has been predicted. Figure 3.1 and Figure 3.2 illustrates the general breakdown of NO_x concentrations averaged across all modelled locations within each AQMA respectively, providing information regarding:

- The regional background, which the Council is unable to influence;
- The local background, which the Council should have some influence over; and
- Other local sources (explicitly modelled), which the Council should be able to directly influence with policy intervention.

[17] Defra, Emissions Factors Toolkit (2023). https://laqm.defra.gov.uk/air-quality/air-quality-assessment/emissions-factors-toolkit/

Figure 3.1 Average NO_x Contribution Across All Modelled Receptors – General Breakdown – Lewes Town Centre AQMA

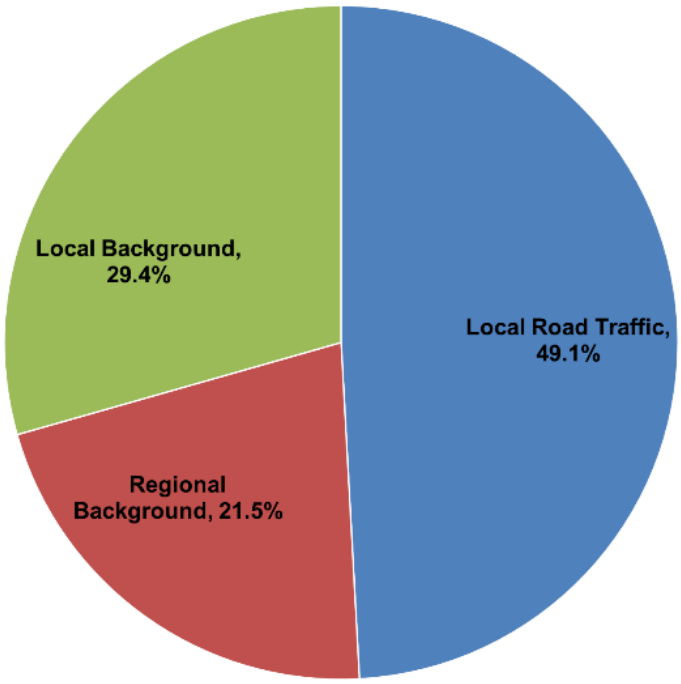

Figure 3.2 Average NO_x Contribution Across All Modelled Receptors – General Breakdown – A259 Newhaven Ring Road AQMA

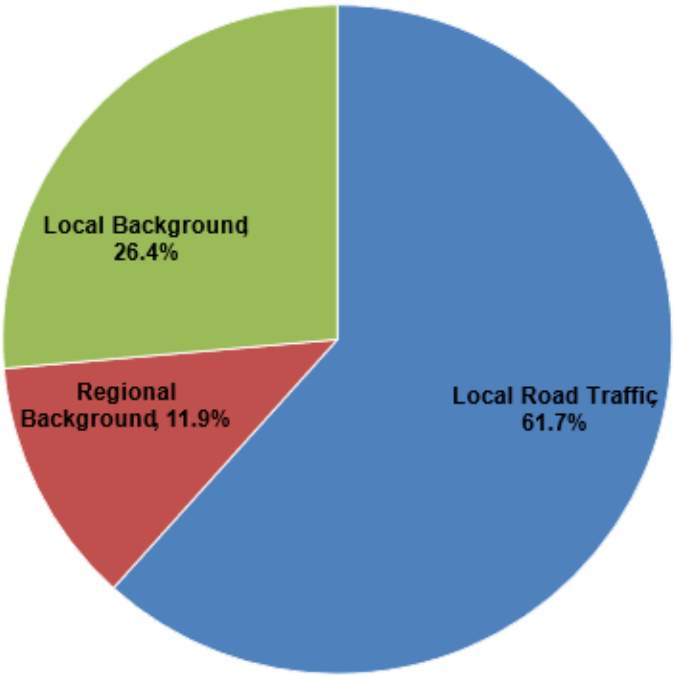

Figure 3.3, Figure 3.4, Figure 3.5 and Figure 3.6 provide detailed breakdowns of the local source contributions to NO_x concentrations, based on:

- The average across all modelled receptors (Figure 3.3 and Figure 3.4). This provides useful information when considering possible action measures to test and adopt. It will however understate road NO_x concentrations in problem areas;
- The receptor where the maximum road NO_x concentration has been predicted within the AQMAs (Figure 3.5 and Figure 3.6). This is to identify the area of most concern and so a good place to test and adopt action plan measures.

Figure 3.3 Source Apportionment of NO_x Averaged Across All Modelled Receptors – Lewes Town Centre AQMA

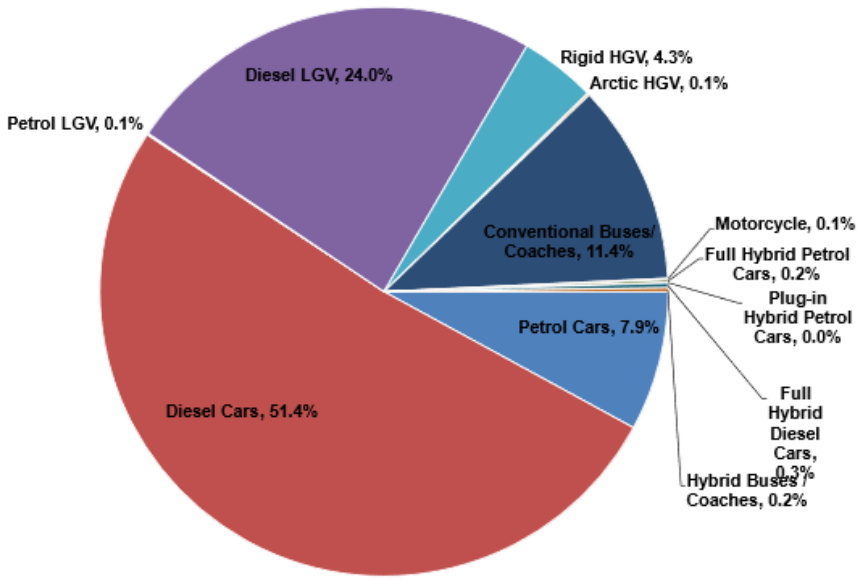

Figure 3.4 Source Apportionment of NO_x Averaged Across All Modelled Receptors – A259 Newhaven Ring Road AQMA

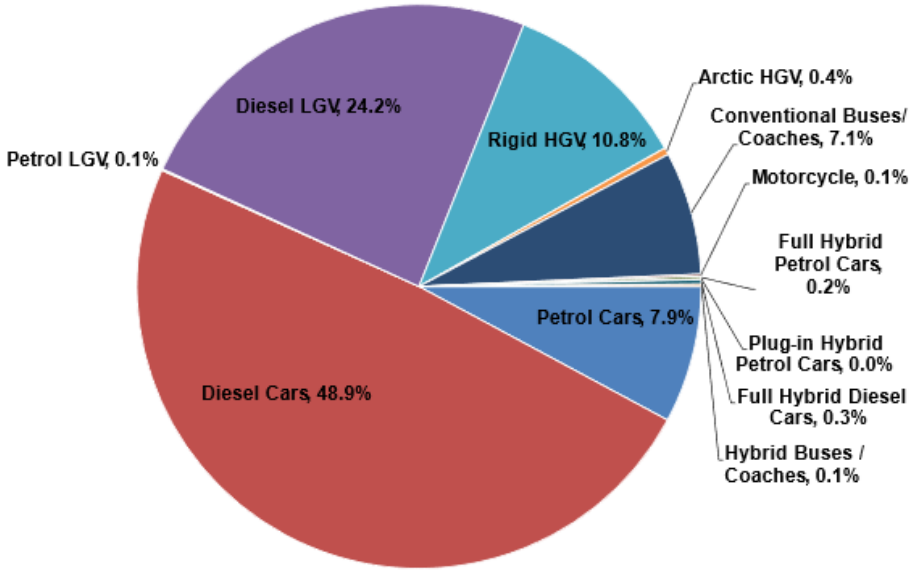

Figure 3.5 Source Apportionment of NO_x at Receptor with the Maximum Road NO_x Concentration (R51) within the Lewes Town Centre AQMA

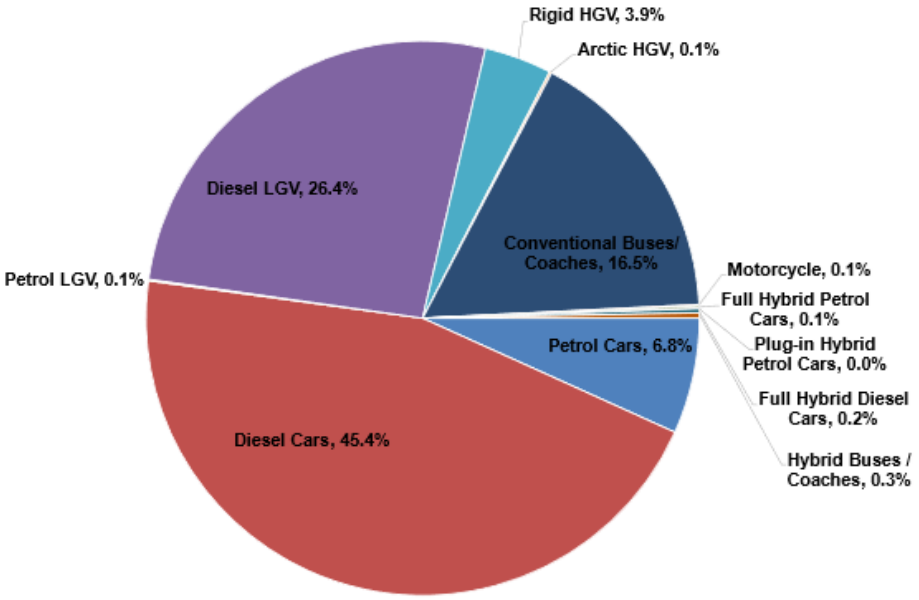

Figure 3.6 Source Apportionment of NO_x at Receptor with the Maximum Road NO_x Concentration (R22) within the A259 Newhaven Ring Road AQMA

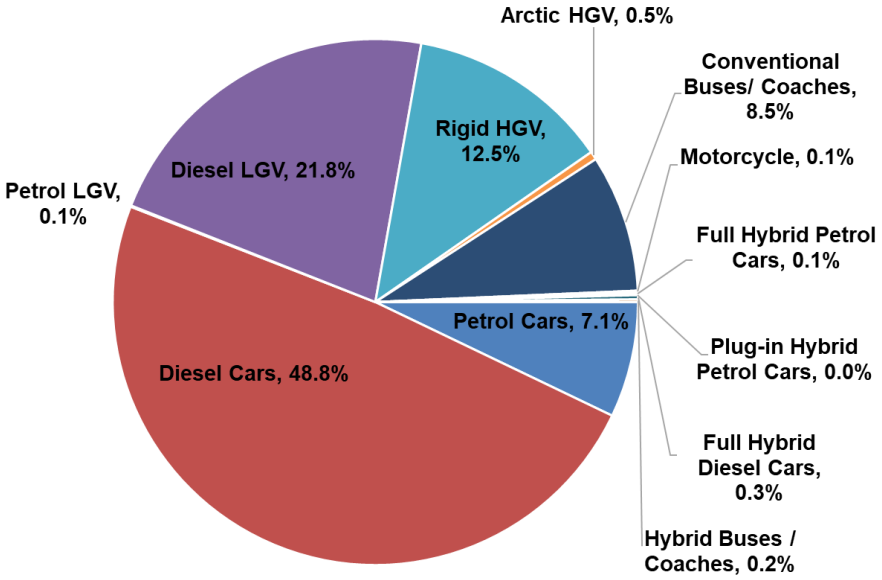

Table 3.2, Table 3.3 and Table 3.4 provide more detailed breakdowns of source apportionment in relation to NO_x concentrations and NO_2 concentrations for the following criteria:

- Contributions based on average NO_x and NO_2 levels across all modelled locations within each AQMA respectively;
- Contributions based on NO_x and NO_2 levels at the highest NO_2 concentration in the Lewes Town Centre AQMA; and
- Contributions based on NO_x and NO_2 levels at the highest NO_2 concentration in the A259 Newhaven Ring Road AQMA.

Table 3.1 Source Apportionment of NO_x - Lewes Town Centre AQMA

Results	All Vehicles	Petrol Cars	Diesel Cars	Petrol LGV	Diesel LGV	Rigid HGV	Artic HGV	Conventional Buses/ Coaches	Motorcycle	Full Hybrid Petrol Cars	Plug-in Hybrid Petrol Cars	Full Hybrid Diesel Cars	Hybrid Buses / Coaches	Background
Average Across all Receptors within AQMA														
NO_x Concentration ($\mu g/m^3$)	13.6	1.1	7.0	0.0	3.3	0.6	0.0	1.5	0.0	0.0	0.0	0.0	0.0	14.1
Percentage of total NO_x	49.1%	3.9%	25.2%	0.0%	11.8%	2.1%	0.1%	5.6%	0.0%	0.1%	0.0%	0.1%	0.1%	50.9%
Percentage of Road Contribution to total NO_x	100.0%	7.9%	51.4%	0.1%	24.0%	4.3%	0.1%	11.4%	0.1%	0.2%	0.0%	0.3%	0.2%	-
At Receptor with Maximum Road NO_x Concentration – R51														
NO_x Concentration ($\mu g/m^3$)	39.2	2.6	17.8	0.0	10.4	1.5	0.1	6.5	0.0	0.1	0.0	0.1	0.1	14.0
Percentage of total NO_x	73.6%	5.0%	33.4%	0.1%	19.4%	2.9%	0.1%	12.1%	0.1%	0.1%	0.0%	0.2%	0.2%	26.4%
Percentage of Road Contribution to total NO_x	100.0%	6.8%	45.4%	0.1%	26.4%	3.9%	0.1%	16.5%	0.1%	0.1%	0.0%	0.2%	0.3%	-

Table 3.2 Source Apportionment of NO_x - A259 Newhaven Ring Road AQMA

Results	All Vehicles	Petrol Cars	Diesel Cars	Petrol LGV	Diesel LGV	Rigid HGV	Artic HGV	Conventional Buses/ Coaches	Motorcycle	Full Hybrid Petrol Cars	Plug-in Hybrid Petrol Cars	Full Hybrid Diesel Cars	Hybrid Buses / Coaches	Background
Average Across all Receptors within AQMA														
NO_x Concentration ($\mu g/m^3$)	30.3	2.4	14.8	0.0	7.3	3.3	0.1	2.1	0.0	0.0	0.0	0.1	0.0	18.8
Percentage of total NO_x	61.7%	4.8%	30.2%	0.1%	14.9%	6.6%	0.2%	4.4%	0.1%	0.1%	0.0%	0.2%	0.1%	38.3%
Percentage of Road Contribution to total NO_x	100.0%	7.9%	48.9%	0.1%	24.2%	10.8%	0.4%	7.1%	0.1%	0.2%	0.0%	0.3%	0.1%	-
At Receptor with Maximum Road NO_x Concentration – R22														
NO_x Concentration ($\mu g/m^3$)	53.3	3.8	26.0	0.0	11.6	6.7	0.3	4.5	0.1	0.1	0.0	0.1	0.1	18.8
Percentage of total NO_x ($\mu g/m^3$)	73.9%	5.3%	36.1%	0.1%	16.1%	9.3%	0.4%	6.3%	0.1%	0.1%	0.0%	0.2%	0.1%	26.1%
Percentage of Road Contribution to total NO_x ($\mu g/m^3$)	100.0%	7.1%	48.8%	0.1%	21.8%	12.5%	0.5%	8.5%	0.1%	0.1%	0.0%	0.3%	0.2%	-

Table 3.3 Source Apportionment of NO_2 - Lewes Town Centre AQMA

Results	All Vehicles	Petrol Cars	Diesel Cars	Petrol LGV	Diesel LGV	Rigid HGV	Artic HGV	Conventional Buses/ Coaches	Motorcycle	Full Hybrid Petrol Cars	Plug-in Hybrid Petrol Cars	Full Hybrid Diesel Cars	Hybrid Buses / Coaches	Background
Average Across all Receptors within AQMA														
NO_2 Concentration ($\mu g/m^3$)	7.2	0.6	3.7	0.0	1.7	0.3	0.0	0.8	0.0	0.0	0.0	0.0	0.0	10.1
Percentage of total NO_2	41.7%	3.3%	21.4%	0.0%	10.0%	1.8%	0.1%	4.7%	0.0%	0.1%	0.0%	0.1%	0.1%	58.3%
Percentage of Road Contribution to total NO_2	100.0%	8.0%	51.4%	0.1%	24.0%	4.3%	0.1%	11.3%	0.1%	0.2%	0.0%	0.3%	0.2%	-
At Receptor with Maximum Road NO_2 Concentration – R51														
NO_2 Concentration ($\mu g/m^3$)	20.0	1.4	9.1	0.0	5.3	0.8	0.0	3.3	0.0	0.0	0.0	0.0	0.1	10.0
Percentage of total NO_2	66.6%	4.5%	30.3%	0.1%	17.6%	2.6%	0.1%	11.0%	0.1%	0.1%	0.0%	0.2%	0.2%	33.4%
Percentage of Road Contribution to total NO_2	100.0%	6.8%	45.4%	0.1%	26.4%	3.9%	0.1%	16.5%	0.1%	0.1%	0.0%	0.2%	0.3%	-

Table 3.4 Source Apportionment of NO_2 - A259 Newhaven Ring Road AQMA

Results	All Vehicles	Petrol Cars	Diesel Cars	Petrol LGV	Diesel LGV	Rigid HGV	Artic HGV	Conventional Buses/ Coaches	Motorcycle	Full Hybrid Petrol Cars	Plug-in Hybrid Petrol Cars	Full Hybrid Diesel Cars	Hybrid Buses / Coaches	Background
Average Across all Receptors within AQMA														
NO_2 Concentration ($\mu g/m^3$)	15.3	1.2	7.5	0.0	3.7	1.6	0.1	1.1	0.0	0.0	0.0	0.0	0.0	12.8
Percentage of total NO_2	54.4%	4.3%	26.6%	0.0%	13.2%	5.9%	0.2%	3.8%	0.1%	0.1%	0.0%	0.1%	0.1%	45.6%
Percentage of Road Contribution to total NO_2	100.0%	7.9%	48.9%	0.1%	24.2%	10.8%	0.4%	7.0%	0.1%	0.2%	0.0%	0.3%	0.1%	-
At Receptor with Maximum Road NO_2 Concentration – R22														
NO_2 Concentration ($\mu g/m^3$)	26.0	1.9	12.7	0.0	5.7	3.3	0.1	2.2	0.0	0.0	0.0	0.1	0.0	12.8
Percentage of total NO_2 ($\mu g/m^3$)	67.0%	4.8%	32.7%	0.0%	14.6%	8.4%	0.3%	5.7%	0.1%	0.1%	0.0%	0.2%	0.1%	33.0%
Percentage of Road Contribution to total NO_2 ($\mu g/m^3$)	100.0%	7.1%	48.8%	0.1%	21.8%	12.5%	0.5%	8.5%	0.1%	0.1%	0.0%	0.3%	0.2%	-

Lewes Town Centre AQMA

Of the contributors to total NO_x concentrations, local road traffic is the largest at 49.1% (13.6 µg/m^3), followed by local background at 29.4% (8.1 µg/m^3), then regional background at 21.5% (5.9 µg/m^3). This means that the Council should be able to influence 78.5% of total NO_x concentrations with intervention policies.

When considering the average breakdown of NO_x concentration across all modelled receptors in more detail, Diesel Cars are the highest contributing vehicle class accounting for 51.4% (7.0 µg/m^3) of any of the vehicle types on average, followed by Diesel LGVs accounting for 24.0% (3.3 µg/m^3) and Conventional Buses / Coaches accounting for 11.4% (1.5 µg/m^3).

When considering the modelled receptor location at which the maximum road NO_x concentration has been predicted, Diesel Cars are found to be the highest contributing vehicle class accounting for 45.4% (10.4 µg/m^3), followed by Diesel LGVs accounting for 26.4% (18.2 µg/m^3) and Conventional Buses / Coaches accounting for 16.5% (6.5 µg/m^3). This is similar to the contribution observed across the whole AQMA.

When considering the average breakdown of NO_2 concentration across all modelled receptors in more detail, Diesel Cars are the highest contributing vehicle class accounting for 51.4% (3.7 µg/m^3) of any of the vehicle types on average, followed by Diesel LGVs accounting for 24.0% (1.7 µg/m^3) and Conventional Buses / Coaches accounting for 11.4% (0.8 µg/m^3).

When considering the modelled receptor location at which the maximum road NO_2 concentration has been predicted, Diesel Cars are found to be the highest contributing vehicle class accounting for 45.4% (9.1 µg/m^3), followed by Diesel LGVs accounting for 26.4% (5.3 µg/m^3) and Conventional Buses / Coaches accounting for 16.5% (3.3 µg/m^3). This is similar to the contribution observed across the whole AQMA.

This indicates that **Diesel Cars, Diesel LGVs and to a lesser degree, Conventional Buses / Coaches are largely responsible for the high concentrations in the Lewes Town Centre AQMA**.

A259 Newhaven Ring Road AQMA

Of the contributors to total NO_x concentrations, local road traffic is the largest at 61.7% (30.3 µg/m^3), followed by local background at 26.4% (12.9 µg/m^3), then regional background at 11.9% (5.9 µg/m^3). This means that the Council should be able to influence 88.1% of total NO_x concentrations with intervention policies.

When considering the average breakdown of NO_x concentration across all modelled receptors in more detail, Diesel Cars are the highest contributing vehicle class accounting for 48.9% (14.8 µg/m^3) of any of the vehicle types on average, followed by Diesel LGVs of 24.2% (7.3 µg/m^3) and Rigid HGVs of 10.8% (3.3 µg/m^3).

When considering the modelled receptor location at which the maximum road NO_x concentration has been predicted, Diesel Cars are found to be the highest contributing vehicle class accounting for 48.8% (26.0 µg/m^3), followed by Diesel LGVs of 21.8% (11.6 µg/m^3) and Rigid HGVs of 12.5% (6.7 µg/m^3). This is similar to the contribution observed across the whole AQMA.

When considering the average breakdown of NO_2 concentration across all modelled receptors in more detail, Diesel Cars are the highest contributing vehicle class accounting for 48.9% (7.5 µg/m^3) of any of the vehicle types on average, followed by Diesel LGVs of 24.2% (3.7 µg/m^3) and Rigid HGVs of 10.8% (1.6 µg/m^3).

When considering the modelled receptor location at which the maximum road NO_2 concentration has been predicted, Diesel Cars are found to be the highest contributing vehicle class accounting for 48.8% (12.7 µg/m^3), followed by Diesel LGVs of 21.8% (5.7 µg/m^3) and Rigid HGVs of 12.5% (3.3 µg/m^3). This is similar to the contribution observed across the whole AQMA.

This indicates that **Diesel Cars, Diesel LGVs and Rigid HGVs are largely responsible for the high concentrations in the A259 Newhaven Ring Road AQMA**.

Limitations

It’s worth noting that the source apportionment is likely to overestimate the emission contribution from conventional buses and coaches within both AQMAs, especially

Lewes Town Centre AQMA. Most of the regional buses and coaches have been upgraded to low / zero emission engines since 2021 and 2022 and conventional vehicles now only account for a relatively small proportion of all buses and coaches. This upgrading was not factored into the modelling due to the lack of traffic manual count survey data. The default England (non-London) traffic composition was used for bus and coach source apportionment. The percentage of conventional buses and coaches is expected to be much lower than that from the modelled results so in turn, the emissions contribution in the region is expected to be much lower than those portrayed in the modelled results.

Targeted Measures

Given that diesel cars contribute the highest levels of NO_x and NO_2 within both AQMAs, LDC aims to continue to support reduction in car travel and to promote sustainable travel by encouraging the implementation of Travel Plans and cycling, bus and rail travel in order to reduce car journeys.

A large proportion of cars, LGVs and HGVs make up through traffic on the A259 Newhaven Ring Road AQMA, which is outside the remit of Lewes District Council. The growth in residential development within the district and in neighbouring authorities will add to traffic volume through the AQMAs and therefore the risk of contributing to higher pollutant concentrations. The LDC environmental team is planning to work more closely with the planning team to make sure the new residential developments introduced in Lewes are not exposed to high air pollution and the joint impact from new planning applications will not adversely impact on the AQMA.

3.4 Required Reduction in Emissions

In line with the methodology presented in Box 7-6 of LAQM.TG (22), the necessary reduction in Road NO_x emissions required to bring the Lewes Town Centre AQMA and A259 Newhaven Ring Road AQMA into compliance is calculated below.

As the modelled NO_2 concentrations are all below the annual mean AQS objective, the required reduction in emissions has been completed using the monitored NO_2

concentrations which exceeded the AQS objective in 2023 adjacent to Lewes AQMA and in 2022 within Newhaven AQMA.

The maximum modelled or monitored concentration in the Lewes Town Centre AQMA in 2023 was 23.7µg/m³. It is therefore has met the required reduction to be below the Air Quality objective. However, while monitored concentrations at site 21 are investigated to determine whether they are truly representative, Table 3.5 provides the details on the calculations of the NO_x emission reduction at the worst-case exposure location, Diffusion Tube Monitoring Site ID 21 in the Lewes Town Centre AQMA. As the site is still under review, this is taken as worst case scenario to indicate the potential reduction required. If the review indicates that Site ID 21 is not representative of the air quality in the area, there will be no exceedance within Lewes Town Centre AQMA since 2020 and this AQMA can be revoked following three years' compliance. The reduction in NO_x required to achieve compliance with the annual mean NO_2 objective of 40 µg/m^3 at the worst-case location of Site ID 21 is **18.6%**. This reduction would achieve the compliance needed at the worst-case location, within the Lewes Town Centre AQMA.

Table 3.5 Required NO_x emission reduction at the worst-case receptor location: Lewes Town Centre AQMA

Metric	Value (Concentrations as µg/m^3)
Worst-Case Relevant Exposure NO_2 Concentration	45.7
Equivalent NO_x Concentration	88.5
Background NO_x	13.1
Background NO_2	10.0
Road NO_x - Current	75.4
Road NO_x - Required (to achieve NO_2 concentration of 39.9µg/m^3)	61.4
Required Road NO_x Reduction	14.0
Required % Reduction	18.6%

Table 3.6 provides the details on the calculations of the NO_x emission reduction at the worst-case exposure location, Diffusion Tube Monitoring Site ID 3 in the A259 Newhaven Ring Road AQMA. The reduction in NO_x required to achieve compliance with the annual mean NO_2 objective of 40 µg/m^3 at the worst-case location of Site ID

3 is **5.6%**. This reduction would achieve the compliance needed at the worst-case location, within the A259 Newhaven Ring Road AQMA.

Table 3.6 Required NO_x emission reduction at the worst-case receptor location: A259 Newhaven Ring Road AQMA

Metric	Value (Concentrations as µg/m^3)
Worst-Case Relevant Exposure NO_2 Concentration	41.3
Equivalent NO_x Concentration	76.3
Background NO_x	17.5
Background NO_2	12.8
Road NO_x - Current	58.8
Road NO_x - Required (to achieve NO_2 concentration of 39.9µg/m^3)	55.5
Required Road NO_x Reduction	3.3
Required % Reduction	5.6%

3.5 Key Priorities

Based on the above source apportionment information, the AQAP measures should focus on the below, priority target areas to bring about and maintain compliance with the AQS objectives. There is often some overlap between some of the priorities. Please note that the below is not listed in a prioritised order, as all priorities collectively and jointly contribute to improving air quality in the local area with each playing an essential role in achieving this goal.

Priority 1 – Transport

The main source of air pollution leading to the declaration of both AQMAs is road transport emissions. Therefore, reducing transport emissions is the key priority for LDC. The approach focuses on areas where LDC has direct control (e.g. planning and procurement of outsourced functions) and areas where measures can be implemented via a partnership with East Sussex County Council or others.

As presented above, the main sources of pollution by vehicle type are Diesel Cars, Diesel LGVs and Conventional Buses / Coaches within the Lewes Town Centre AQMA and Diesel Cars, Diesel LGVs and Rigid HGVs within the A259 Newhaven

Ring Road AQMA. Therefore LDC will continue to prioritise reducing general car travel and reduce emissions from freight / delivery vehicles (especially HGVs).

Priority 2 – Planning and Infrastructure

There are emerging developments within and around Lewes District. These developments are likely to contribute to increasing traffic through both AQMAs in the district therefore it is essential to mitigate potential air quality impacts effectively by being involved in decision making at an early stage for current and future developments.

Priority 3 – Public Information and Behavioural Change

As discussed in further detail in Section 3.1 the impact of air pollution on public health via behavioural change is a major driver for improving air quality. Within Lewes a key priority is to ensure the health and wellbeing of the community is maintained. To achieve this, the intervention with highest potential to improve air quality is associated with combining behavioural interventions with other policy or infrastructure-based interventions. The Council is responsible for encouraging and facilitating these changes through education and awareness as well as through providing public information. Improving air pollution for the benefit of public requires a wide-reaching perspective and will therefore not be specific to the AQMAs but will instead be aimed at the whole district.

Priority 4 - Strategies and Policy Guidance

The Local Plans and Neighbourhood Plans set out the considerations that will be applied by LDC for all development proposals. The Council will work with developers and partner organisations to ensure the delivery of infrastructure, services and community facilities necessary to develop and maintain sustainable communities. This will not only apply to air quality but all relevant environmental aspects.

The Local Transport Plan and its supporting modal strategies set out the measures and considerations to improve the local air quality via transportation.

Priority 5 – Air Quality Monitoring (Evidence for Improvement)

This priority is to ensure satisfactory air quality monitoring data is available to track outcomes of the implemented AQAP measures.

LDC is also part of the Sussex Air Quality Partnership. The aim of the partnership is to assist partners in complying with their statutory Local Air Quality Management (LAQM) duties and to contribute to improving air quality and health in Sussex.

The objectives of the partnership are to pool limited resources to provide:

- A coordinated and high standard air quality evidence base.
- Information and advice to the public.
- The data management of the numerous continuous monitoring sites across Sussex.
- Coordination and delivery of strategic work and projects to improve air quality in Sussex.

4 Development and Implementation of Lewes District Council AQAP

4.1 Consultation and Stakeholder Engagement

In developing/updating this AQAP, we have worked with other local authorities, agencies, businesses and the local community to improve local air quality. Schedule 11 of the Environment Act 1995, as amended by the Environment Act (2021), requires local authorities to consult the bodies listed in Table 4.1. In addition, we have undertaken the following stakeholder engagement:

- Public consultation available via the Lewes DC website

The response to our consultation stakeholder engagement is given in Appendix A: Response to Consultation.

Table 4.1 Consultation Undertaken

Consultee	Consultation Undertaken
The Secretary of State	Yes
The Environment Agency	Yes
National Highways	Yes
All neighbouring local authorities	Yes
Any National Park authority as appropriate	Yes
The County Councils (if a District Council)	Yes
Other public authorities as appropriate, such as Public Health officials	Yes
Bodies representing local business interests and other organisations as appropriate	Yes

4.2 Steering Group

A steering group was established during the update process to drive forward the development of the new AQAP. The core aim of the steering group was to identify measures for inclusion within the AQAP that would be effective both in terms of reducing NO_2 concentrations and also feasible in terms of implementation and delivery.

The AQAP steering group meeting was held on 18th December 2024 and a public consultation is planned for the final draft by March 2025. Measures identified in Table 5.1(AQAP Measures) will be discussed and examined.

At the initial AQAP steering group meeting, representatives from various departments (including Planning, Transport, and Sustainability), East Sussex County Council and local groups provided valuable input and comments. The steering group agreed to review and update the proposed measures in the final version of the plan, incorporating additional measures identified during the discussion.

5 AQAP Measures

Table 5.1 shows the Lewes District Council AQAP measures. It contains:

- A list of the actions that form part of the plan;
- The departments/organisations responsible for delivering this action;
- Estimated cost of implementing each action;
- Expected benefit in terms of pollutant emission and/or concentration reduction;
- The timescale for implementation; and
- How progress will be monitored.

NB: Please see future Annual Status Reports (ASRs) for regular annual updates on implementation of these measures.

Table 5.1 Air Quality Action Plan Measures

Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Target Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments/Potential Barriers to Implementation
1	Lewes – Cycle Route 90	Transport Planning and Infrastructure	Cycle network	2019	2029	ESCC, SDNPA Sustrans Cycle Lewes LTC LDC	Development Contributions and ESCC	NO	Not Funded	£1m - £10m	Planning	Reduction of NO_2 and PM emissions	Increased use of sustainable transport modes	The ESCC LCWIP for Lewes highlights a potential route along the priority route 210. This alignment would require traffic reduction measures in town including possible contra-flow cycling routes Alternatively, there are opportunities for an alignment of a future route along the LCWIP secondary routes 210 or 203	Various route options have been considered over the years but it has not been possible to identify a satisfactory route. Any new alignment of a National Cycle Route would need to comply to LTN1/20 and meet Sustrans standards set within Paths for Everyone to attract government funding. The town centre and western section requires more design work and further consultation with key stakeholders
2	Coordination of building and road works in the Lewes and Newhaven town areas and across the district	Transport Planning and Infrastructure	Other	Ongoing	Ongoing	ESCC Network Management	ESCC	NO	Funded	£10k - £50k	Implementation	Reduction of NO_2 and PM emissions	Number of agreements and s.61 agreements	East Sussex Highways with Balfour Beatty (ESCC Network Management); includes coordinating all works undertaken on the public highway, issuing the appropriate permits and licences for activities that impact the network and enforcing regulations	Ongoing
3	Target long-distance freight management & heavy traffic through town	Transport Planning and Infrastructure	Other	Ongoing	Ongoing	ESCC, LDC	ESCC, LDC	NO	Funded	>£10m	Implementation	Reduction of NO_2 and PM emissions	Traffic counts	Supports sustainable economic growth through facilitating the efficient movement of goods and people through implementation of the Local Transport Plan 4	Ongoing
4	Reduce emissions from idling vehicles - raise awareness through campaigns	Public Information	Other	Ongoing	Ongoing	LDC	Subject to successful funding bids	NO	Funded	£50k - £100k	Implementation	Reduction of NO_2 and PM emissions	Reduction in number of complaints received by LDC	Campaigns will continue to be carried out as part of active travel programmes	Currently ongoing but only as funding is available

Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Target Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments/Potential Barriers to Implementation
5	Lewes Parking Management – programmes for extension of parking-controlled area, re-allocation of parking/loading spaces, higher charges for long stay parking, variable price parking permits, car spaces for low-emission vehicles, car-clubs and car share, increase provision of two-wheelers parking	Transport Planning and Infrastructure	Other	Ongoing	Ongoing	ESCC, LDC, Lewes Town Council, Business Community, Network Rail/Southern (Lewes Rail Station), private operators	ESCC, LDC, Lewes TC	NO	Partially Funded	£100k-£500k	Planning	Reduction of NO_2 and PM emissions	Participation	Ongoing effective parking management is necessary in Lewes town and this measure has a phased approach with higher charges for residents' second parking permits and discounted permits for lower emission vehicles having been introduced in 2020	
6	Partnership work with bus & train operators (LTP4) Increase bus and train patronage through supporting marketing campaign, extend use of subsidised/ discounted fares, improve bus stop facilities, bus information	Transport Planning and Infrastructure	Other	Ongoing	Ongoing	ESCC/ Bus Operators Train Operating Companies	DfT for BSIP	NO	Funded	>£10M	Implementation	Reduction of NO2 and PM emissions	Increase in number of bus/train service users year on year	The ESCC Bus Service Improvement Plan delivers a fully integrated service with simple, multi-modal tickets, more bus priority measures, high-quality information for all passengers in more places and better turn-up-and-go frequencies that keep running into the evenings and at weekends. The maximum single bus fare is £3 with participating operators with short and medium trips in East Sussex being capped at £1 and £2.	As funding is available.
7	Address traffic flow & congestion on	Traffic Management	Urban Traffic Control, Congestion	Ongoing	Ongoing	ESCC	ESCC	NO	Partially Funded	>10m	Implementation	Reduction of NO_2 and PM emission	Improvement in traffic flow	Feasibility	Acknowledged as a priority, this measure is subject to funding

Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Target Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments/Potential Barriers to Implementation
	Newhaven Ring Road		management, traffic reduction												accessibility. Currently at feasibility stage.
8	A259 South Coast Corridor Package – A259 Corridor Package	Traffic Management	UTC, Congestion management, traffic reduction/ Other	Ongoing	Ongoing	ESCC	ESCC	NO	Partially Funded	>10m	Implementation	Reduction of NO_2 and PM emission	Improvement in traffic flow	Improvements to crossings completed summer 2021 has helped to address flow and congestion	Will be further considered through A259 South Coast Corridor Package
9	New pipeline schemes - cycling infrastructure (Local Cycling & Walking Infrastructure Plan)	Transport Planning and Infrastructure	Cycle network/Other	Ongoing	Ongoing	ESCC	ESCC Local Transport Capital Programme	NO	Partially Funded	>10m	Implementation	Reduction of NO2 and PM emission	Reduced traffic and congestion at peak time, reduced re-circulation, reduced emissions; and modal shift and sustainable travel behaviour	Lewes station cycle parking is complete, other measures planned as per LCWIP	As funding is available
10	Cycle Parking	Promoting Travel Alternatives	Promotion of cycling	Ongoing	Ongoing	Cycle Lewes, Lewes Town Council, Foundry Healthcare, LDC	Various	NO	Partially Funded	£50k - £100k	Implementation	Reduction of NO2 and PM emission	Noticeable increase in modal shift and sustainable travel behaviour	Cycle Lewes has installed new bike parking facilities at two of Foundry Healthcare Lewes' GP sites; River Lodge and St Andrew's. Provision of additional undercover cycle parking at Lewes station is in the pipeline. In Newhaven, cycle stands are being installed around the former Co-op and existing Wave Active building	As funding is available
11	Walking events/groups	Promoting Travel Alternatives	Promotion of walking	Ongoing	Ongoing	Local Community Groups	Community Funding	NO	Funded	£50k - £100k	Implementation	Reduction of NO_2 and PM emissions	Increased active travel and sustainable transport modes	https://www.southdowns.gov.uk/get-active/on-foot/walk-with-a-group/ https://www.escis.org.uk/event/lewes-health-walk-every-friday/ https://lewesfootpathsgroup.org.uk/ https://www.ournewhaven.org.uk/people/societies-clubs-organisations/newhaven_ramblers https://sussexcommunity.org.uk/our-services/environmmentclimatechange/newhaven-heritage-routes/	Other walking groups can be found via the internet

Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Target Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments/Potential Barriers to Implementation
12	Support Active Travel	Promoting Travel Alternatives	Promotion of cycling and walking	Ongoing	Ongoing	Sussex Community Development Association & Ouse Valley Climate Action (National Lottery) Cycle Seahaven	Community Funding	NO	Funded	£50k - £100k	Implementation	Reduction of NO_2 and PM emissions	Increased use of sustainable transport modes	https://sussexcommunity.org.uk/ Aims of the project include encouraging behaviour change to help the environment and supporting new greener travel initiatives around walking, cycling and e-bikes. Dr Bike is a group of cycle enthusiasts from Cycle Seahaven who help local people to use their bikes more. Dr Bike surgeries repair damaged and worn bicycles.	
13	Promoting sustainable travel to school	Promoting Travel Alternatives	School Travel Plans	Ongoing	Ongoing	LDC (as a member of the Sussex Air Quality Partnership) Cycle Seahaven ESCC Green United	Active Travel England and other Funding Bids, Community Funding	Partially	Funded	£100k - £500k	Planning	Reduction of NO_2 and PM emissions	Increased use of sustainable transport modes	Surveys have demonstrated an increase in walking and cycling to school, as well as a decrease in students being driven to school further to engagement with Sustrans air quality staff visiting the schools. Air Quality sessions are delivered often alongside complimentary sessions such as Bike Skills and Dr Bikes. These events reinforce the connection between air quality and active travel. East Sussex County Council has introduced a temporary School Street at Southover C of E Primary School in Lewes. This restricts vehicle access during peak school hours to make the pick-up and drop-off safer and more enjoyable, and to make it easier for people to walk, wheel and cycle to school. It is hoped this measure will become permanent. Green United is a group set up for young people in Lewes town and supports a sustainable lifestyle including school travel options.	As funding is available

Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Target Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments/Potential Barriers to Implementation
14	Cargo Bikes/Last Mile Delivery	Freight and Delivery Management	Other	2024	Ongoing	GetBikery/ OVESCo/LDC	Funding Bids	NO	Funded	£50k - £100k	Implementation	Reduction of NO_2 and PM emissions	Increased use of sustainable transport modes and progress of project expansion to Newhaven	LDC obtained grants for e-cargo bikes and worked closely with OVESCo to set up the Get Bikery initiative, an eCargo Bike project based in Lewes that aims to provide a zero-carbon alternative to short journeys ordinarily made by cars and vans. Bikes are available to rent for households wanting to give up the car, for local tradespeople wishing to replace the van on some days, for fixed regular deliveries or for community events.	Further funding necessary for project expansion
15	Lewes Integrated Movement Strategy	Promoting Travel Alternatives/ Traffic Management	Traffic reduction, promotion of cycling and walking, other	2024	Ongoing	Lewes Town Council, LDC, ESCC, Lewes Climate Hub, Lewes Living Streets, Cycle Lewes	TBC	NO	Partially Funded	£1m - £10m	Planning	Reduction of NO_2 and PM emissions	Increased use of sustainable transport modes, improvement in traffic flow	A movement strategy is a plan that considers the needs of all transport users including pedestrians, cyclists and other wheelers, bus and rail users and other vehicle users – resident or visitor. Lewes Town Council is leading on this project and has established a Project Board which has agreed a vision to develop people-centred mobility services available to all.	As funding is available
16	Re-imagining Newhaven Programme	Transport Planning and Infrastructure	Public transport improvements - interchanges stations and services / cycle network / other	2022	2025	LDC	LDC with capital grant funding: Future High Streets Fund, Town Deal and Levelling Up Fund (Round 1)	NO	Funded	£1m - £10m	Implementation	Reduction of NO_2 and PM emissions	Progression towards completion /increase in active travel/foot passengers using ferry	The project will connect key attractions, transport hubs and destinations within Newhaven. A new pedestrian crossing will link the station, bus stop, and taxi rank to the Newhaven Ferry Terminal. An engaging walking route between the train station and the river is proposed. Dominance of vehicular infrastructure will be reduced, enhancing biodiversity and making space for people through relandscaping of the existing interchange and Railway Quay. For the town centre, safety after dark for pedestrians and active travel users will be improved, and gateways and wayfinding into the town centre for pedestrians and cyclists will be upgraded.	Nearing completion

Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Target Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments/Potential Barriers to Implementation
														The number of foot passengers using the cross-channel ferry service between Newhaven and Dieppe will increase and foot passengers' travel experience at the Newhaven end of the journey will improve.	
17	Newhaven MoveAbility Scheme	Promoting Travel Alternatives	Promotion of cycling and wheeling	2024	2027	Sussex Community Development Association/ Sustrans	Motability	NO	Funded	£100k - £500k	Implementation	Reduction of NO_2 and PM emissions	Increased use of sustainable transport modes	The MoveAbility project in Newhaven is a new inclusive cycle and wheeling programme for disabled people. As part of this three-year funding, disabled people will be able to trial, hire and loan bicycles within the Lewes district of Sussex and surrounding areas.	
18	Develop a pathway to a Sussex wide low carbon taxi fleet	Promoting Low Emission Transport	Taxi emission incentives	Ongoing	Ongoing	LDC/East Sussex Local Authorities	LDC	Partially	Partially Funded	£500k - £1m	Planning	Reduction of NO_2 and PM emissions	Number of black cab/hackney drivers making transition to EVs	East Sussex taxi survey undertaken in 2024. Liaising with East Sussex Licencing Group to seek viable methods of supporting transition to EVs	As funding is available
19	Decarbonise the LDC waste fleet (go all electric) by 2028	Vehicle Fleet Efficiency	Vehicle Retrofitting programme/ Other	Ongoing	2028	LDC	LDC	NO	Funded	>£10m	Implementation	Reduction of NO_2 and PM emissions	Progression towards target	The Council is currently in the process of electrifying its fleet as per the 2022 Fleet strategy. New EVs will arrive in April 2025 and the existing fleet is being re-powered. Fuel for the combustion engine vehicles has been 100% hydrotreated vegetable oil (HVO) diesel since early 2024. (Whilst HVO does not reduce particulate or NOx emissions, it does reduce carbon emissions.)	Co-benefits for LDC Net Zero Strategy
20	Lewes District Council Workplace travel planning/car sharing	Promoting Travel Alternatives	Workplace Travel Planning	Ongoing	Ongoing	ESCC/LDC	Funded	NO	Funded	£10k - £50k	Implementation	Reduction of NO_2 and PM emissions	Reduced traffic and congestion at peak time, reduced emissions, increased use of sustainable transport modes	LDC is a member of the easitNETWORK group through which we hope to influence travel behaviour in the area by providing a full range of transport options to encourage staff to adopt more sustainable commuting habits. EasitNETWORK is a social enterprise, not for profit	

Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Target Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments/Potential Barriers to Implementation
														organisation that is all about sustainable travel. LDC also supports membership of the East Sussex Car Share Scheme.	
21	Funding mechanisms e.g. workplace parking levy	Traffic Management	Workplace Travel Planning	2025	TBC	LDC	LDC	NO	Not Funded	TBC	Planning	Reduction of NO_2 and PM emissions		Feasibility study to be undertaken	As funding available
22	Car Club and EV Programme	Promoting Low Emission Transport	Other	2023	2024	LDC	Funding Bid	NO	Funded	£500k - £1m	Complete	Reduction of NO_2 and PM emissions	Uptake in low emission vehicles	Installation of 67 public electric vehicle charge points (including three for car club cars) which supported the conversion of two car club cars from petrol to electric.	
23	Enshrine AQ measures and Lewes DC proposed objective of 30 $\mu g/m^3$ NO_2 Annual Mean into Planning through adoption via emerging Lewes Plan	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	Ongoing	2026	LDC/SDNPA	LDC	NO	Funded	<£10k	Planning	Reduction of NO_2 and PM emissions through sustainable develop ment	Robust air quality mitigation measures included in Lewes DC Local Plan	The Environment Act 2021 sets legally binding targets to protect the environment and clean the air. LDC's emerging corporate plan puts sustainability at the heart of local planning. Goals include providing a well-managed and protected local environment and cleaner air across the district. Whilst control of pollution is highly regulated by government there is a role for local government in ensuring that planning proposals support sustainability and minimise pollution both during construction and for future occupiers.	Will require collaborative working with LDC and SDNPA Planners
24	Adoption of the Air Quality and Emissions Mitigation Guidance for Sussex through the emerging local plan or SPD	Policy Guidance and Development Control	Regional Groups Co-ordinating Programmes to develop Area wide Strategies to reduce emissions and improve air quality	Ongoing	2025	LDC (as a member of the Sussex Air Quality Partnership)/ SDNPA	LDC	NO	Funded	<£10k	Planning	Reduction of NO_2 and PM emissions through sustainable develop ment	Adoption of the Sussex-air Guidance	The planning system plays an important role in reducing air pollution as well as minimising exposure to poor air quality through good design. The Sussex Air Quality Partnership, a partnership of 15 local authorities across Sussex and Public Health bodies, is dedicated to enhancing the air quality throughout Sussex. This document sets out the partnership's latest guidance relating to planning applications made in Sussex and in the area	Will require support and agreement from SDNPA

Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Target Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments/Potential Barriers to Implementation
														administered by the South Downs National Park Authority (SDNPA).	
25	Non-Road Mobile Machinery Emissions Standards	Promoting Low Emission Plant	-	2025	Ongoing	LDC (as a member of the Sussex Air Quality Partnership)/ SDNPA	LDC	NO	Funded	<£10k	Planning	Reduction of NO_2 and PM emissions from develop ment	Adoption of the Sussex-air Guidance	The non-road mobile machinery (NRMM) Low Emission Zone in London (LEZ) requires all engines with a 37 kW - 560 kW power rating to meet emission standards based on engine emission 'stages. ' Current standards are EU stage IV as a minimum. LDC will require that the same emission standards be met on construction sites through securing conditions via planning in construction environmental management plans (CEMPs)	Will require support and agreement from SDNPA
26	Permit all industrial processes falling under Environmental Permitting Regulations 2016	Environment al Permits	Other	Ongoing	Ongoing	LDC /Environment Agency	LDC	NO	Funded	£10k - £50k	Implemen tation	Reduction of NO_2 and PM emissions	Cleaner industry	Ensure all relevant industrial sites are permitted	Will require some collaboration with EA regulatory officers
27	Align air quality measures with net zero measures to support co-benefits for both strategies	Policy Guidance and Development Control	Other Policy	2025	Ongoing	LDC	LDC	NO	Funded	<£10k	Planning	Reduction of NO_2, PM and CO_2 emissions through strategic policy alignment	Alignment of Annual Sustainability Report and Annual Air Quality Report, collaborative working between sustainability and AQ officers	Policies to reduce air pollution often provide win-win strategies for both health and the climate. Addressing short-lived climate pollutants not only improves air quality and human health but is also an effective way to mitigate some of the effects of climate change, lowering the risk of breaching irreversible climate tipping points. Tackling air quality and climate change reduces health inequalities and social injustice and this integrated action helps to justify many of the measures taken to reduce greenhouse gases by improving air quality at the same time. https://www.the-ies.org/resources/integrating-action-air-quality	

Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Target Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments/Potential Barriers to Implementation
28	Raising awareness of air quality issues	Public Information	Via the internet/via other mechanisms	Ongoing	Ongoing	LDC (as a member of the Sussex Air Quality Partnership)	LDC	Partially	Funded	£100k - £500k	Implementation	Reduction of NO_2 and PM emissions	Awareness/ feedback	The partnership exists to assist partners in complying with their statutory Local Air Quality Management (LAQM) duties and to contribute to improving air quality and health in Sussex. The Sussex-air website provides information on all the air quality monitoring sites across Sussex, air quality reports and provides valuable resources on air pollution, health impacts and how to make a difference locally.	As funding is available
29	Social media based campaigns	Public Information	Via the Internet	Ongoing	Ongoing	LDC (as a member of the Sussex Air Quality Partnership)	LDC	NO	Funded	<£10k	Implementation	Reduction of NO_2 and PM emission	Awareness/ feedback	Supporting ongoing campaigns including anti-idling and Global Action Plan's Clean Air Day.	
30	Green Infrastructure	Other	Other	2025	2027	LDC	LDC with capital grant funding	NO	Funded	£100k - £500k	Planning	PM emission capture	Progression towards installation	In Newhaven, a green wall is proposed to the east elevation of the former Co-op and the north elevation of Dacre Road car park in the Newhaven Square development and the new West Beach restaurant and Changing Places unit will have living green roofs	Core Policy 11 (*Green Infrastructure*) of the Local Plan Part 1 sets out the overall strategic framework for managing and enhancing the green infrastructure network across the district and in Part 2, Policy DM14: Multi-functional Green Infrastructure details requirements for development
31	Air Monitoring	Other	Other	Ongoing	Ongoing	LDC (as a member of the Sussex Air Quality Partnership)	LDC	Partially	Funded	£50k - £100k	Implementation	Scrutiny and awareness raising of NO_2 and PM emissions	Air Quality Annual Status Reports to be approved by Defra	Under the Local Air Quality Management regime (LAQM) LDC has a duty to monitor air quality across the district. The council will continue to monitor air quality through its substantial network of diffusion tubes alongside the automatic monitoring station in Lewes and a new monitoring station in Newhaven.	
32	Membership of Sussex-air Partnership	Other	Other	Ongoing	Ongoing	LDC and all other Sussex Local Authorities	LDC	NO	Funded	<£10k	Implementation	Reduction of NO_2 and PM emissions through strategic	Continued membership of Partnership	The Sussex-air Partnership is comprised of officers from all the Local Authorities in Sussex. Objectives of the partnership are to provide a coordinated and	

Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Target Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments/Potential Barriers to Implementation
												policy alignment		high standard air quality evidence base, information and advice to the public, data management of the numerous continuous air monitoring sites across Sussex, and coordination and delivery of strategic work and projects to improve air quality in Sussex. Partners meet quarterly to discuss air quality policy and practice, decide on budget allocations, review existing contract performance and work on joint bids and project delivery.	

5.1 Timescales of the AQAP Measures

Several measures outlined in Table 5.1 were implemented and are currently ongoing. One measure was successfully completed by 2024. The target for the first stage of measure completion is 2026. For the measures which remain incomplete by this date, examination of implementation barriers will be conducted, and necessary resolutions will be undertaken to ensure most measures are successfully completed by 2028.

5.2 Air Quality Partners

LDC is collaborating with ESCC on the below actions:

- Coordination of building and road works in the Lewes town area (LTP)
- Target long-distance freight management & heavy traffic through town (LTP)
- Lewes Parking Management (LTP)
- Partnership work with bus & train operators (LTP)
- New pipeline schemes - cycling infrastructure

LDC is collaborating with ESCC, SDNP and/or local community groups on the below actions:

- Lewes – Cycle Route 90
- Cycle parking
- Supporting active travel
- Promoting sustainable travel to school
- Cargo bikes/last mile delivery
- Lewes integrated movement strategy
- Re-imagining Newhaven

5.3 Maintaining Safe Air Quality

LDC will continue monitoring local air quality and providing analysis within the ASRs to ensure the objectives are maintained in the future. An Air Quality Strategy (AQS) will be produced and implemented upon the revocation of both AQMAs within Lewes in the future. Collaboration with air quality partners on the long-term projects, particularly those focused on public information and regional policies, will continue to be integral to the local Air Quality Strategy, ensuring sustained success after the objectives have been achieved.

LDC confirms that monitoring will continue within the district to ensure any substantial uplift in traffic numbers generated by new developments which may increase NO_2 levels will be captured in monitoring results. Furthermore, any AQS put in place will be regularly reviewed and updated as necessary.

Air Quality Standards are concentrations recorded over a given time period, which are considered to be acceptable in terms of what is scientifically known about the effects of each pollutant on health and the environment. They can be used as a benchmark to indicate whether air pollution is getting better or worse. However, there is no safe level of air pollution. With a more stringent air pollution guidelines value published by the World Health Organisation (WHO), EU Directive 2024 and lower objective values pursued by many other local authorities (e.g. Brighton and Hove), Lewes District Council aims to achieve a lower annual NO_2 objective of 30 $\mu g/m^3$. Upon the achievement of compliance within both AQMAs, LDC will continue to work toward better local air quality with the new proposed local NO_2 objective of 30 $\mu g/m^3$. This is 25% lower than the UK legal requirement of 40 $\mu g/m^3$ and is indicative of our commitment within this plan to improve local air quality beyond UK standards in order to provide better health protection across the district.

The table below shows the main sets of Standards and Guidelines for NO_2 annual mean concentration in outdoor air from the UK Government, EU Directives, WHO guidelines, neighbouring local authorities and proposed local objectives.

Table 5.2 Comparison of NO_2 Annual Mean objectives

Standards and Guidelines	NO_2 Annual Mean Objectives
EU & English Limits set 2010 (current LAQM objectives)	40 µg/m^3
EU Directive 2024	20 µg/m^3
WHO 2021 Guidelines	10 µg/m^3
Brighton and Hove AQAP Objective	30 µg/m^3
Lewes Future Proposed Objective	30 µg/m^3

6 Quantification of Measures

6.1 Assumptions

Most of the action plan measures set out in Table 5.1 are very difficult to quantify. No detailed studies have been completed for any measure to reliably inform the likely effect in terms of change in traffic or fleet composition as a result of the measures. Some measures do allow for a high-level analysis of reductions in emissions. A summary consideration of the measures and whether they can be quantified is contained in below. The table also details the AQMA most affected by the measures.

Table 6.1 Quantification of Measures

Measure No.	Measure	Assumptions for Quantification	Assumed Reduction in AQMA	
			Lewes Town Centre AQMA	A259 Newhaven Ring Road AQMA
1	Lewes – Cycle Route 90	Insufficient detail to quantify this measure. Reduction based on literature review and professional judgement. According to a literature review on cycling route's impact on NO_2 reductions, a reduction of around 0.5-1 µg/m³ is observed in several journals. As the cycle route is around Lewes town centre, the impact on Newhaven AQMA is expected to be minimal.	0.5-1µg/m³	<0.5µg/m³
2	Coordination of building and road works in the Lewes town area (LTP)	This is a measure from Local Transport Plan. Insufficient detail to quantify this measure. Reduction based on literature review and professional judgement.	<0.5µg/m³	<0.5µg/m³
3	Target long-distance freight management & heavy traffic through town (LTP)	This is a measure from Local Transport Plan. Insufficient detail to quantify this measure. Reduction based on professional judgement	<0.5µg/m³	<0.5µg/m³
4	Reduce emissions from idling vehicles - raise awareness as part of broader AQ campaigns	Insufficient detail to quantify this measure. Reduction based on literature review and professional judgement	<0.5µg/m³	<0.5µg/m³
5	Lewes Parking Management (LTP)	This is a measure from Local Transport Plan. Insufficient detail to quantify this measure. Reduction based on professional judgement	<0.5µg/m³	<0.5µg/m³
6	Partnership work with bus & train operators (LTP)	This is a measure from Local Transport Plan. Insufficient detail to quantify this measure. Reduction based on professional judgement	<0.5µg/m³	<0.5µg/m³
7	Address traffic flow & congestion on Newhaven Ring Road	Insufficient detail to quantify this measure. Reduction based on literature review and professional judgement.	<0.5µg/m³	0.5-1µg/m³
8	A259 South Coast Corridor Package – A259 Corridor Package	Insufficient detail to quantify this measure. Reduction based on literature review and professional judgement.	<0.5µg/m³	0.5-1µg/m³
9	New pipeline schemes - cycling infrastructure (Local Cycling & Walking Infrastructure Plan)	Insufficient detail to quantify this measure. Reduction based on literature review and professional judgement.	<0.5µg/m³	<0.5µg/m³
10	Cycle parking	Insufficient detail to quantify this measure. Reduction based on professional judgement	<0.5µg/m³	<0.5 µg/m³

Measure No.	Measure	Assumptions for Quantification	Assumed Reduction in AQMA	
			Lewes Town Centre AQMA	A259 Newhaven Ring Road AQMA
11	Walking events/groups	Insufficient detail to quantify this measure. Reduction based on professional judgement	<0.5µg/m³	<0.5µg/m³
12	Active travel	Insufficient detail to quantify this measure. Reduction based on professional judgement	<0.5µg/m³	<0.5µg/m³
13	Promoting sustainable travel to school	Insufficient detail to quantify this measure. Reduction based on literature review and professional judgement. According to a literature review on travel plans, a reduction of around 0.5-1 µg/m³ is estimated.	<0.5-1µg/m³	<0.5-1µg/m³
14	Cargo Bikes	Insufficient detail to quantify this measure. Reduction based on professional judgement	<0.5µg/m³	<0.5µg/m³
15	Lewes Integrated Movement Strategy	Insufficient detail to quantify this measure. Reduction based on professional judgement	0.5-1µg/m³	<0.5µg/m³
16	Re-imagining Newhaven	Insufficient detail to quantify this measure. Reduction based on literature review and professional judgement	<0.5µg/m³	<0.5-1µg/m³
17	MoveAbility	Insufficient detail to quantify this measure. Reduction based on professional judgement	<0.5µg/m³	<0.5µg/m³
18	Low Emission Taxi Fleet	Insufficient detail to quantify this measure. Reduction based on professional judgement	<0.5µg/m³	<0.5µg/m³
19	Low Emission Waste Fleet	Insufficient detail to quantify this measure. Reduction based on professional judgement	<0.5µg/m³	<0.5µg/m³
20	Lewes District Council Workplace travel planning/car sharing	Insufficient detail to quantify this measure. Reduction based on professional judgement	<0.5µg/m³	<0.5µg/m³
21	Funding mechanisms e.g. workplace parking levy	Insufficient detail to quantify this measure. Reduction based on professional judgement	<0.5µg/m³	<0.5µg/m³
22	Car Club and EV Programme	Insufficient detail to quantify this measure. Reduction based on professional judgement	<0.5µg/m³	<0.5µg/m³
23	Enshrine AQ measures and Lewes DC proposed objective of 30 µg/m³ NO_2 Annual Mean into Planning	Insufficient detail to quantify this measure. Reduction based on professional judgement	<0.5 µg/m³	<0.5 µg/m³
24	Adoption of the Air Quality and Emissions Mitigation Guidance for Sussex	Insufficient detail to quantify this measure. Reduction based on professional judgement	<0.5 µg/m³	<0.5 µg/m³
25	Non-Road Mobile Machinery Emissions Standards	Insufficient detail to quantify this measure. Reduction based on professional judgement	<0.5 µg/m³	<0.5 µg/m³

Measure No.	Measure	Assumptions for Quantification	Assumed Reduction in AQMA	
			Lewes Town Centre AQMA	A259 Newhaven Ring Road AQMA
26	Permit all industrial processes falling under Environmental Permitting Regulations 2016	Insufficient detail to quantify this measure. Reduction based on professional judgement	<0.5µg/m³	0.5-1µg/m³
27	Align air quality measures with net zero measures	Insufficient detail to quantify this measure. Reduction based on professional judgement	<0.5µg/m³	<0.5µg/m³
28	Raising awareness of air quality issues	Insufficient detail to quantify this measure. Reduction based on professional judgement	<0.5µg/m³	<0.5µg/m³
29	Social media based campaigns	Insufficient detail to quantify this measure. Reduction based on professional judgement	<0.5µg/m³	<0.5µg/m³
30	Green Infrastructure	Insufficient detail to quantify this measure. Reduction based on professional judgement	<0.5µg/m³	<0.5µg/m³
31	Air Monitoring	Insufficient detail to quantify this measure. Reduction based on professional judgement	<0.5µg/m³	<0.5µg/m³
32	Membership of Sussex-air Partnership	Insufficient detail to quantify this measure. Reduction based on professional judgement	<0.5µg/m³	<0.5µg/m³

6.2 Cost Benefit Analysis of Measures

6.2.1 Methodology

Using the above assumptions around the quantitative pollution reduction and assumed costs, each measure was given a score as set out below.

Table 6.2 Cost Score

Estimated Cost of Measure	Score
< £10k	7
£10k - £50k	6
£50k - £100k	5
£100k - £500k	4
£500k - £1m	3
£1m - £10m	2
> £10m	1

Table 6.3 Benefit Score

Estimated Reduction in Pollutant Concentrations	Score
<0.5 µg/m³	1
0.5-1 µg/m³	2
1-2 µg/m³	3
2-3 µg/m³	4
3-4 µg/m³	5
4-5 µg/m³	6
>5 µg/m³	7

Using the scores above, the below matrix was implemented to work out the cost-benefit. Higher scores are awarded for those measures which are cheapest with the greatest effect, with the lowest scores awarded for those which will be costly with limited reduction in pollution.

Table 6.4 Cost Benefit Scoring Matrix

		Estimated Reduction in Pollutant Concentrations						
		>0.5 µg/m³	0.5-1 µg/m³	1-2 µg/m³	1-2 µg/m³	2-3 µg/m³	3-4 µg/m³	>4 µg/m³
Cost of Measure	< £10k	7	14	21	28	35	42	49
	£10k - £50k	6	12	18	24	30	36	42
	£50k - £100k	5	10	15	20	25	30	35
	£100k - £500k	4	8	12	16	20	24	28
	£500k - £1m	3	6	9	12	15	18	21
	£1m - £10m	2	4	6	8	10	12	14
	> £10m	1	2	3	4	5	6	7

The analysis should also account for the feasibility of implementing the measures, with those likely to progress given a higher priority than those which are acknowledged to be a challenge to implement. The feasibility score factors in local influences such as political backing, accessibility to funding options and resources available. As such, each measure was assigned a 'Feasibility score based on the table below. The score from the matrix was multiplied by this score.

Table 6.5 Feasibility Scores

Feasibility Score	Score
Measure has already been started and just requires progressing	7
Very easy to implement, and political good will towards this, sufficient resources	6
Relatively easy to implement, resources available	5
Possible to implement but may require some learning/campaigning, moderately time intensive	4
Challenging but still feasible, may require additional support and resources	3
Difficult to implement, no political appetite, time and resource intensive	2
Very difficult to implement, no political appetite, time and resource intensive	1

6.2.2 Cost-Benefit Analysis

Following the above assessment, it has been possible to rank the measures by cost, benefit and feasibility, this is shown in Table 6.6 below. With the feasibility weighting meaning that measures which are the easiest to progress are scored higher, these

are prioritised. The feasibility is accessed by referencing the cost of each measure and using the local knowledge of LDC staff.

Table 6.6 Cost Benefit Analysis of Measures

Measure No.	Measure	Cost Score	Air Quality Effect Score	Feasibility Score	Overall Score
26	Permitting	6	2	6	72
12	Active travel	7	1	7	49
28	Air quality websites	7	1	7	49
29	Social media campaigns	7	1	7	49
29	Social media based campaigns	7	1	7	49
11	Walking events/groups	7	1	7	49
27	Align AQ and net zero	7	1	7	49
32	Sussex Air Partnership	7	1	7	49
24	Sussex Air Planning Guidance	7	1	6	42
25	NRMM	7	1	6	42
13	Promoting sustainable travel to school	4	2	5	40
2	Coordination of building and road works in the Lewes town area (LTP)	6	1	6	36
4	Reduce emissions from idling vehicles - raise awareness as part of broader AQ campaigns	5	1	7	35
20	LDC Workplace travel planning	7	1	5	35
23	AQ measures and NO_2 30µg/m^3 objective	7	1	5	35
31	Air monitoring	5	1	7	35
1	Lewes – Cycle Route 90	2	2	7	28
15	Lewes IMS	2	2	7	28
16	Re-imagining Newhaven Programme	2	2	7	28
17	Newhaven MoveAbility	4	1	7	28
30	Green infrastructure	4	1	7	28
10	Cycle parking	5	1	5	25
14	Cargo bikes/LMD	5	1	5	25
7	Address traffic flow & congestion on Newhaven Ring Road	4	2	3	24
5	Lewes Parking Management (LTP) -	4	1	5	20
22	Car club and EV programme	3	1	5	15
21	Workplace parking levy	6	1	2	12
18	Low Carbon Taxi Fleet	3	1	3	9
6	Partnership work with bus & train operators (LTP)	1	1	7	7
8	A259 South Coast Corridor Package – A259 Corridor Package	1	2	3	6
19	LDC Waste Fleet	1	1	6	6
9	New pipeline schemes - cycling infrastructure (LCWIP)	1	1	5	5
3	Target long-distance freight management & heavy traffic through town (LTP)	1	1	3	3

6.3 Year of Objective Compliance

For Lewes Town Centre AQMA, the modelling results predict that all receptors within the AQMA have modelled NO_2 annual mean concentrations below 36 µg/m^3 in 2022 (below and not within 10% of AQS objectives). However, one monitoring location (Site ID 21) which is on the High Street, not within the Lewes Town Centre AQMA, recorded an exceedance of 45.7 µg/m^3 in 2023. This had been considered to be impacted by a boiler outlet pipe and hence not representative of the local air quality however the tube has been relocated and initial review for 2024 data continues to show an exceedance. Further analysis is necessary to determine whether the AQMA needs to be extended to cover the High Street area. All other monitoring locations within the Lewes Town Centre AQMA have achieved compliance for 4 consecutive years since 2020.

With regard to the A259 Newhaven Ring Road AQMA, the modelled receptor with the highest concentration within the AQMA reported a NO_2 result of 39.0 µg/m^3 in 2022, within 10% of the AQS objective. Meanwhile, the highest reported monitoring site in the A259 Newhaven Ring Road AQMA recorded an annual mean NO_2 concentration of 41.3µg/m^3 in 2022, reduced to 38.2 µg/m^3 in 2023, within 10% of the AQS objective hence continued monitoring and review are necessary for this AQMA.

Lewes District Council's aim is that implementation of the outlined measures will result in the relevant objective(s) being attained by:

- 2025 within and in close proximity to the Lewes Town Centre AQMA; (pending review of Site 21)
- 2027 within the A259 Newhaven Ring Road AQMA (dependent on level of through traffic and predicted tail pipe emission reduction)

Appendix A: Response to Consultation

Table A.1 Summary of Responses to Consultation and Stakeholder Engagement on the AQAP

Consultee	Category	Response
<Insert consultee e.g. Chamber of Commerce>	<Insert category e.g. Business>	<Insert text e.g. Disagree with plan to remove parking on High Street in favour of buses and cycles; consider it will harm business of members>

Appendix B: Reasons for Not Pursuing Action Plan Measures

Table B.1 Action Plan Measures Not Pursued and the Reasons for that Decision

Action category	Action description	Reason action is not being pursued (including Stakeholder views)
<Select from the categories in the blue instruction box above>	<Insert description of measure>	<Insert text here>

<Appendix C: Add Additional Appendices as Required>

For example, where the selection of AQAP measures has been supported by further studies, e.g. quantitative appraisal of action plan measures through dispersion modelling, or other feasibility studies, this work should be included here.

Glossary of Terms

Abbreviation	Description
AQAP	Air Quality Action Plan - A detailed description of measures, outcomes, achievement dates and implementation methods, showing how the local authority intends to achieve air quality limit values'
AQMA	Air Quality Management Area – An area where air pollutant concentrations exceed / are likely to exceed the relevant air quality objectives. AQMAs are declared for specific pollutants and objectives
AQS	Air Quality Strategy
ASR	Air Quality Annual Status Report
BSIP	Bus Service Improvement Plan
COMEAP	Committee on the Medical Effects of Air Pollutants
Defra	Department for Environment, Food and Rural Affairs
DfT	Department for Transport
ESCC	East Sussex County Council
EFT	Emissions Factors Toolkit
EU	European Union
HGV	Heavy Goods Vehicle
IMD	Indices of Multiple Deprivation
LAQM	Local Air Quality Management

LDC	Lewes District Council
LGV	Light Goods Vehicle
LCWIP	Local Cycling and Walking Infrastructure Plan
LSOA	Lower Super Output Area
LTP	Local Transport Plan
NDP	Neighbourhood Development Plan
NHS	National Health Service
NO_2	Nitrogen Dioxide
NO_x	Nitrogen Oxides
PM_{10}	Airborne particulate matter with an aerodynamic diameter of 10µm (micrometres or microns) or less
$PM_{2.5}$	Airborne particulate matter with an aerodynamic diameter of 2.5µm or less
SDNPA	South Downs National Park Authority
WHO	World Health Organization

References

- Environment Act 1995, as amended by the Environment Act 2021
- South Downs Local Plan. South Downs National Park Authority. (2019). South Downs Local Plan 2014-2033. Adopted 2 July 2019.
- Lewes District Local Plan Part 1: Joint Core Strategy 2010-2030. Lewes District Council. (2016). Adopted 11 May 2016.
- Towards a Lewes Local Plan: Spatial Strategy and Policy Directions. Lewes District Council. (2023). In process to be adopted.
- Fourth East Sussex Local Transport Plan 2024 – 2050 (LTP4). East Sussex County Council. (2024).
- East Sussex Local Cycling and Walking Infrastructure Plan (LCWIP). East Sussex County Council. (2020).
- East Sussex Bus Service Improvement Plan (BSIP) East Sussex County Council. (2021).
- East Sussex Rail Development Strategy. East Sussex County Council. (2013). Approved November 2013.
- Lewes Neighbourhood Plan. Lewes Town Council. (2019). Adopted April 2019.
- Newhaven Neighbourhood Development Plan. Newhaven Town Council. (2019). Adopted 14 November 2019.
- Department of Health's Committee on the Medical Effects of Air Pollutants (COMEAP) Report 2010. Committee on the Medical Effects of Air Pollutants. (2010). The Mortality Effects of Long-Term Exposure to Particulate Air Pollution in the United Kingdom. Department of Health.
- Every breath we take: the lifelong impact of air pollution. Report of a working party. London: RCP. Royal College of Physicians. (2016).
- Office for Health Improvement and Disparities Guidance. Office for Health Improvement & Disparities. (2024)
- Public Health Outcomes Framework (England). Office for Health Improvement & Disparities. (2024)
- "Air Quality – A Briefing for Directors of Public Health". Defra, Public Health England, Local Government Association. (2017).

- Guidance on improving outdoor air pollution and health: review of interventions. Public Health England. (2019).
- LAQM.TG (22) - Local Air Quality Management Technical Guidance. Department for Environment, Food and Rural Affairs. (2022).
- WHO global air quality guidelines: particulate matter (PM2.5 and PM10), ozone, nitrogen dioxide, sulfur dioxide and carbon monoxide. Geneva: World Health Organization. (2021).
- Directive (EU) 2024/2881 of the European Parliament and of the Council of 23 October 2024 on ambient air quality and cleaner air for Europe
- The Air Quality Strategy for England, Scotland, Wales and Northern Ireland. Department for Environment, Food and Rural Affairs. (2007).