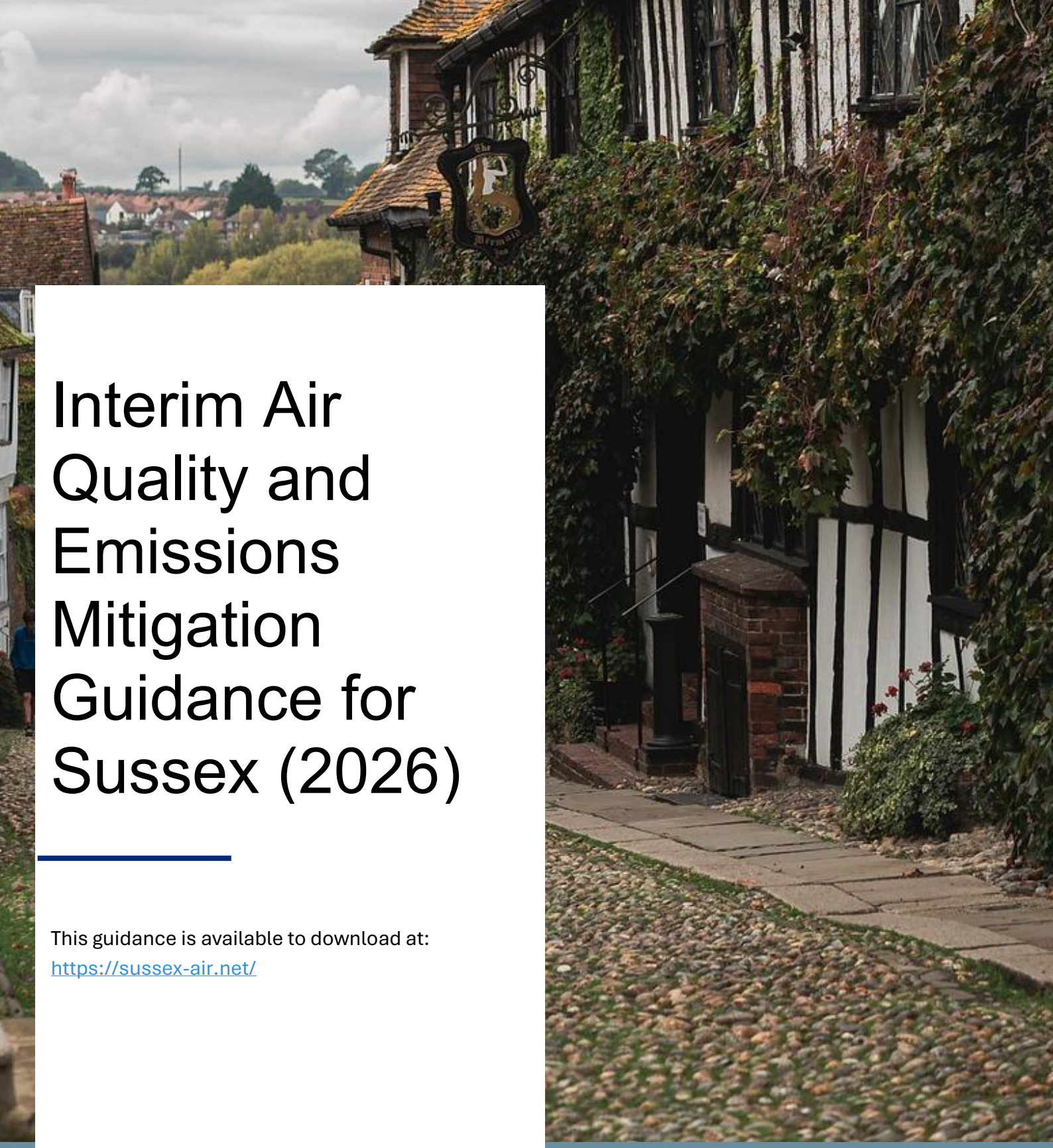

Interim Air Quality and Emissions Mitigation Guidance for Sussex (2026)

This guidance is available to download at:
https://sussex-air.net/

JULY 2026

Version 2.0

SUSSEX-air
Air Quality Partnership

Participating Members of the Sussex Air Quality Partnership

Foreword

Air quality in Sussex continues to improve in many locations and, as a result, a number of Air Quality Management Areas (AQMAs) are being revoked where concentrations of nitrogen dioxide (NO_2) and other pollutants are consistently below national air quality objectives. As more areas achieve compliance, it is increasingly common for proposed developments not to trigger the traditional thresholds that would require a detailed air quality assessment, particularly where there is no reasonable risk of breaching statutory objectives.

Historically, air quality assessments have focused on demonstrating compliance with national air quality objectives and limit values. While these thresholds remain important regulatory benchmarks, they should not be interpreted as representing "safe" levels of pollution. A substantial and growing body of epidemiological evidence, reflected in the World Health Organization (WHO) Air Quality Guidelines, indicates that adverse health effects can occur at concentrations well below current statutory objectives, and that no threshold has been identified below which air pollution poses no risk to human health. Consequently, the absence of an exceedance risk does not equate to the absence of harm. Air pollution remains one of the most significant environmental risks to public health, with fine particulate matter ($PM_{2.5}$) linked to respiratory and cardiovascular disease, adverse birth outcomes and premature mortality, even at low concentrations. It is therefore essential that new development does not unnecessarily worsen air quality or contribute to cumulative pollution burdens, regardless of whether statutory objectives are predicted to be met.

In light of this evidence, the objective of this guidance is not solely to prevent exceedances of statutory limits, but also to support the continued reduction of population exposure to air pollution wherever practicable. This reflects a shift towards a public health-based approach, recognising that all developments have the potential to contribute to cumulative pollution burdens and that opportunities to improve air quality and reduce exposure should be encouraged even in areas that currently meet regulatory standards.

National policy is evolving. Defra is currently preparing new guidance for applicants and planning authorities in England on how $PM_{2.5}$ targets should be considered in planning applications and decision-making. A revised National Planning Policy Framework (NPPF) is also expected, alongside wider changes to the planning system. In parallel, the Institute of Air Quality Management (IAQM) is updating its Land-Use Planning and Development Control: Planning for Air Quality guidance. As the NPPF and associated guidance are currently under review, this is an interim update focused on clarifying specific issues. A more comprehensive revision will be considered once the revised policy framework is published.

The Sussex Air Quality Planning guidance adopts a “low emission strategies” approach, focused on preventing cumulative and long-term health impacts from development. Its aim is to ensure that emissions associated with additional traffic, building energy use, and construction activities are avoided, minimised, or mitigated as far as reasonably practicable—even where statutory objectives are already being met.

Applicants are therefore expected to demonstrate within their planning submissions that they have:

- identified the key sources of air pollution associated with their proposals
- taken appropriate and proportionate steps to minimise emissions of air pollutants and their precursors
- incorporated design choices, technologies, and behaviours that contribute to cleaner air and healthier communities

Ensuring good air quality is a shared responsibility. By embedding air quality considerations into the planning process, we can support sustainable development that protects public health and the environment now and in the future.

Contents

Purpose of this Guidance

Air quality is a material consideration when deciding planning applications and this document aims to provide a framework explaining how air quality associated with development schemes across Sussex (including applications within the South Downs National Park) should be assessed and effectively mitigated.

The overarching principle of the guidance is to, as far as it is possible, design emissions out of a scheme, and mitigate or offset any residual emissions. Thus, the guidance aligns with the aims of Defra's Clean Air Strategy on reducing emissions to protect health and the environment.

The purpose of this document is to:

1. Provide clarity on how local authorities interpret relevant Local Plan policies.
2. Provide advice for developers and consultants on how to assess and mitigate the impact of new development on local air quality.
3. Detail a consistent approach for developers and Local Planning Authorities (LPAs) to:
    a. address impacts on local air quality
    b. ensure development incorporates good 'air quality' design to reduce emissions and/or exposure
    c. monitor the environmental performance of the proposal during construction and operation, where necessary.
4. Implement the Air Quality Action Plan
5. Prevent unnecessary delays to the planning process.

This document focuses on emissions from transport (nitrogen oxides (NO_X)) and particulate matter ($PM_{2.5}$/PM_{10}), which are the principal emissions responsible for non-compliance with the UK AQS in Sussex and the UK. Emissions from construction are also considered.

This guidance reflects the information available at the time of publication. Although the online version is periodically updated, it may not always include the most recent legislative or policy changes. Users should not assume that linked legislation or directives are the latest versions and must independently check that they are referring to up-to-date documents when making decisions.

Development Classification, Assessment and Mitigation

This section explains the steps required to assess and mitigate the impact that new developments may have on local air quality. The steps should include:

1. Classification of the development proposal
2. Assessment and the quantification of the impact on local air quality
3. Determination of an appropriate level of air quality mitigation, to minimise pollutant concentrations and reduce exposure.

Some development will also be required to monitor the environmental outcomes of the proposal to evaluate the implementation of mitigation, and whether remedial action is required.

Developers or their air quality consultants are strongly encouraged to enter pre-application discussion with their LPA, including the air quality officer, as early as possible to avoid unnecessary delays and to discuss site-specific considerations.

Development proposals should align with local Public Health policies and priorities including Health Impact Assessments, based on the Public Health England 'Review of interventions to improve outdoor air quality and public health' document.[1]

Proposals for industrial development should not overlook regulatory compliance with alternative regimes. Planning consent does not negate any requirement for an Environmental Permit and an air quality assessment submitted under the planning regime will not provide the relevant detail for an environmental impact assessment or stack height calculation.

[1] https://assets.publishing.service.gov.uk/media/5fbf93258fa8f559dbb1add9/Review_of_interventions_to_improve_air_quality_March-2019-2018572.pdf

1. Classification of the development proposal

Not all development will require an air quality assessment, or an emissions mitigation statement. The screening checklist, shown below in **Table 1**, is designed to assess the need for an air quality assessment or an emissions mitigation statement, by comparing the proposal to a series of criteria which are often used to screen out significant air quality effects.

Table 1 - Screening Checklist

Is the proposed development	Yes	No
a MAJOR development, as defined by Town and Country Planning (Development Management Procedure) Order (England) 2015	☐	☐
within or in relevant proximity to an Air Quality Management Area	☐	☐
in an area close to exceeding the Air Quality Objectives (a candidate AQMA). Contact the relevant Local Authority Air Quality Officer [2]	☐	☐
B8 and distribution use class with a floorspace of 500m^2 or more	☐	☐
Likely to exceed any of the criteria in Table 6.2 of the EPUK/ IAQM's *Planning for Air Quality Guidance*	☐	☐
One or more combustion/heating plant(s) with a total combined net thermal output greater than 1MW	☐	☐

IF NO TO ALL

The development is considered a MINOR development for the purpose of this guidance.

No air quality and emission mitigation assessment are required; however, the **Good Design measures** set out in this document should be incorporated in the design, as a minimum. This may be secured via condition.

[2] Look this up at: https://uk-air.defra.gov.uk/aqma/maps or contact the relevant Local Authority Air Quality Officer

IF YES TO ANY

The development is considered a MAJOR development for the purpose of this guidance.

The scale and nature of this type of proposal is such that, in addition to **Good Design measures**, an **air quality assessment** is required to evaluate potential impacts on public health and the local environment. In addition, an **emissions mitigation assessment**, including *damage-cost calculation*, must be provided to identify and quantify necessary mitigation measures.

2. Good Design

Good design is required for **all developments**, including those that do not meet any of the criteria in **Table 1 - Screening Checklist**. All development should incorporate measures that improve or protect local air quality. The measures listed below are a baseline requirement and therefore cannot be counted as additional air-quality improvements within any damage-cost calculations.

Developments should minimise emissions, support sustainable and active travel, reduce dependence on private cars, future-proof buildings, and limit exposure to pollution. Applicants are expected to engage early with the local authority to agree how good design principles will be applied.

Detailed good-design measures are provided in **Appendix A – Good Design measures** and **Appendix B – Good Design Checklist**, and all planning applications must include a completed **Appendix D – Air Quality Validation Checklist** showing how air quality has been considered. Meeting minimum air quality standards alone is not sufficient, and schemes that miss reasonable opportunities to improve or protect air quality may risk delays.

3. Air Quality Assessment

The purpose of an air quality assessment is to determine the significance of a development's predicted impact on local air quality—both under existing baseline conditions and once the development is in operation—and to evaluate how sensitive the proposed development will be to pollution at each stage. Assessments must be completed by a suitably qualified air quality consultant[3] and must be submitted before the application is determined; they cannot be secured by condition.

Air quality assessments must fully reflect the local authority's Local Air Quality Management (LAQM) evidence base, including the latest Air Quality Annual Status Report, Air Quality Action Plans (AQAPs), Air Quality Strategies, and any relevant supplementary planning documents. This requirement also applies where planning authorities adopt stricter targets than national standards, such as WHO guideline levels, or where reductions in exposure are required even when concentrations fall below the national Air Quality Standards (AQS).

Depending on the scale, nature and location of a development, the assessment may be **qualitative** (drawing on existing monitoring and screening information) or **quantitative** (using predictive modelling). All assessments must consider impacts on human receptors as well as sensitive non-human receptors, including designated ecological sites (SSSIs, SPAs, SACs), irreplaceable habitats and sensitive cultural assets such as museums.

Irreplaceable habitats found within Sussex include ancient woodland, ancient and veteran trees, sand dunes, salt marsh, and lowland fen. Where the process contribution of a development proposal is 1% or greater of the relevant critical load or critical level for nitrogen oxides, this indicates a potentially significant effect and raises concern regarding the risk of deterioration of ancient woodland, requiring detailed assessment and ecological judgement.

Please note:

- Local Monitoring information is available on the Sussex-air website: http://www.sussex-air.net/ and on the Local Authority Air Quality pages
- Applicants are advised to consult the local planning authority regarding any extant planning permissions to inform cumulative impact assessments
- Major developments, or those in areas lacking sufficient monitoring data, may be required to undertake additional air quality monitoring to support the assessment.

[3] In line with the IAQM (2018) position statement: Competent Air Quality Expert for Environmental Impact Assessments

Relevant guidance documents include:

- $PM_{2.5}$ Targets: Interim Planning Guidance
- Environmental Protection UK (EPUK) & IAQM – Land-Use Planning & Development Control: Planning for Air Quality (for methodology and significance criteria).
- IAQM – A Guide to the Assessment of Air Quality Impacts on Designated Nature Conservation Sites.
- Environmental Protection UK – Biomass and Air Quality Guidance
- IAQM Odour Guidance

The use of Artificial Intelligence (AI) to develop an Air Quality Assessment is not prohibited. However, it must be clear in the report if AI has been used and for what.

i. Air Quality Modelling

Where modelling is required, it must follow the latest LAQM Technical Guidance and other IAQM relevant guidance.

Modelling reports must include sufficient detail for the council to reproduce the assessment if required.

Modelling must use recognised, validated local-scale dispersion models and be undertaken by technically competent personnel.

Dispersion Modelling

- Use agreed monitoring data, traffic data, and meteorological data.
- Undertake modelling with recognised, verified local-scale models by technically competent personnel and in accordance with LAQM Technical Guidance
- Liaise with the planning department for information on any other schemes that should be included in a cumulative impacts' scenario.

The study should include:

- Existing conditions (baseline year): Assess current air quality at agreed receptor locations and validate the dispersion model.
- Future baseline (do-nothing): Predict air quality in the assessment year(s) without the development.
- With development (do-something): Predict future road traffic emissions and air quality with the development in place.
- With development + mitigation: Predict future conditions with the development and the identified mitigation measures applied.

Uncertainty and Sensitivity Testing

Uncertainties are inherent in air quality assessments and must be explicitly addressed in conclusions and mitigation. Developers should consider supplementing local authority monitoring with their own to improve verification and confidence.

Assessments must be fully transparent. All input data, model settings, assumptions and calculation methods must be clearly presented in the main report or in appendices. Full statistical analysis of model performance must be provided to allow the local authority to understand the reliability of the predictions.

The following must be included:

- Error metrics: Report the Root Mean Square Error (RMSE) and/or other uncertainty measures, explaining how residual uncertainty affects conclusions. For site suitability, consider evaluating against the AQS minus the uncertainty measure (e.g., AQS – RMSE).
- Input evaluation & sensitivity testing:
  - Test key assumptions (e.g., background trends and emission factors often assumed to follow DEFRA projections).
  - Use local monitoring data to check whether these assumptions are reasonable.
  - Where possible, perform model verification across multiple years to assess the consistency of predictive performance.

ii. Demolition and Construction Impacts

Demolition and construction can cause nuisance dust and elevated PM_{10}/$PM_{2.5}$ levels. Modelling is generally not suitable because emissions vary with activity and weather conditions. The assessment should instead:

- Focus on the distance and duration over which impacts may occur; and
- Follow IAQM guidance, e.g., Guidance on the Assessment of the Impacts of Construction on Air Quality and the Determination of their Significance.
- Follow Sussex Air CEMP Template

iii. Cumulative Impacts

Multiple developments in proximity can cumulatively worsen air quality, even if each alone appears minor. Ensure that the cumulative impact of all relevant permitted and allocated developments, including associated traffic impacts, is appropriately assessed.

This may occur when:

- A single large site is split into multiple units (e.g., industrial estates or retail parks);
- A major development is divided into smaller applications;
- Several unrelated developments come forward in the same area.

Liaise with neighbouring authorities and engage with planning officers to ensure cumulative impacts are fully considered. These should be addressed through comprehensive assessments—typically via outline applications or a Master/Parameter Plan supported by a holistic Air Quality Assessment (AQA).

4. Emission Mitigation Assessment

Emissions Mitigation Statements are required for all developments that meet any of the criteria in **Table 1 - Screening Checklist**, unless otherwise advised by the Local Planning Authority.

Where required, mitigation must be agreed with the local authority in the form of an Emissions Mitigation Statement, which:

- itemises the proposed measures
- provides full costings
- demonstrates that the overall package is appropriate and effective

The DEFRA Appraisal Damage Cost Toolkit must be used for all damage cost calculations. An example of how to undertake these calculations is provided in **Appendix C – Emissions Assessment Calculator**.

The measures proposed to address air quality impacts must be relevant, proportionate and appropriate to:

- local planning policies
- the local authority's Air Quality Action Plan or Air Quality Strategy
- the type, scale and location of the development
- the findings of the air quality assessment and the calculated damage-cost value

To count as offsetting measures, actions must go beyond standard requirements, such as those set out in local planning policy, the baseline Good Design measures, or building regulations. The total cost of the measures should be at least equivalent to the calculated health damage cost. Where possible, the likely emission reductions from each measure should also be quantified.

Measures must provide a tangible reduction in emissions or exposure relative to their cost. Where the pollution-reduction benefit is minimal, only a proportionate fraction of the measure's cost can be counted towards offsetting the damage cost. For example, while green roofs or green walls offer valuable environmental benefits, their direct pollutant-removal effect is limited; therefore, only a small proportion of their cost can be used in damage-cost calculations.

Table 2: 'Offsetting' Mitigation provides examples of suitable offsetting measures. The list is not exhaustive, and other options may be considered where appropriate, depending on the scale of development and local air-quality priorities.

Table 2: 'Offsetting' Mitigation

RESIDENTIAL
Support the Local Cycling and Walking Infrastructure Plans
Improve cycle paths to link to the existing local cycle network
Provide electric bikes
Additional air-quality mitigation implemented over and above baseline obligations established by building regulations
Support the Local EV charging infrastructure
Invest in EV charging infrastructure within the development over and above the current recommended parking standards (minimum 7kW (fast) charger)
Set up and maintain a car club within the development or contribute to the cost of a local car club
Set up or join an existing car sharing scheme for residents
Designate parking spaces for car club/car sharing vehicles
Designate parking spaces for low emission vehicles
Provide vouchers for alternatives to private car use
Invest in the creation and establishment of Green Infrastructure. Including trees and woodland (urban forests) to enhance deposition and filtration of particulate matter and atmospheric pollutants; and strategically positioned hedgerow and tree planting, particularly in locations adjacent to typical highway pollution sources, to support the dispersion and interception of atmospheric pollutants where open-access receptors are present (such as footpaths, property access points, and publicly accessible open spaces).
Contribute to unfunded measures identified in Air Quality Action Plan and Air Quality Strategies.
COMMERCIAL/INDUSTRIAL (as above – plus)
Invest in local walking and cycling initiatives
Provide public transport subsidy for employees

Use zero or ultra-low emission service vehicles
Ensure all new commercial vehicles comply with the latest European Emission Standards
Implement a fleet strategy that reduces emissions
Contribute to the cost of on-street EV charging
Set up differential parking charges to favour cleaner vehicles
Implement a low emission strategy
Include lease controls that require vehicles of a particular emission standard
ADDITIONAL MITIGATION
Contribute to local bike/e-bike hire schemes
Contribute to local low or zero emission vehicle refuelling/recharging infrastructure
Contribute to low emission bus service provision or waste collection services
Contribute to renewable fuel and energy generation projects
Provide adequately sized buffer zones from development to protected sites and irreplaceable habitats to prevent loss or deterioration. Buffer zones should consist of semi-natural vegetation suitable for the purpose of buffering impacts.

Where possible, measures should be incorporated directly into the development design. If not, the local planning authority may secure them through planning conditions. Where sufficient on-site measures cannot be achieved, the authority may seek a **Section 106 contribution** towards wider air-quality improvements in the area.

Appendix A – Good Design measures

Effective air-quality design works by interrupting one or more links in the **Source – Pathway – Receptor** chain:

- Source: where pollution originates (e.g. traffic, combustion appliances, commercial kitchens)
- Pathway: how pollution travels through the environment (e.g. street canyons, air flows, open windows)
- Receptor: the people exposed (e.g. residents, schoolchildren, workers) but also the settings such as hospitals, care homes, early years settings, ancient woodland, ancient and veteran trees, Sussex chalkland

Good design aims to reduce emissions at the source, disrupt or lengthen the pathway, or protect the receptor, thereby reducing overall exposure to pollution. The measures below support these principles.

1. Site Layout and Building Placement (Pathway & Receptor)

- Optimise site layout by placing the most sensitive uses away from the most polluted areas.
- Set occupied buildings back from the roadside where feasible.
- Avoid creating or worsening street canyons.
- Use building orientation, angling and stepped façades to increase air turbulence and promote pollutant dispersion.
- Position habitable rooms away from the most polluted elevations (e.g. avoid bedrooms facing busy roads).
- Provide Green Infrastructure designed in consideration of the wider landscape, following best-practice guidance[4], and with clear establishment measures in place.
- Use targeted vegetative barriers between pollution sources and pedestrian routes.
- Establishing meaningful buffer distances between emission sources (roads, car parks, service yards, combustion plant) and sensitive receptors. Buffers should exceed typical biodiversity buffers to protect woodland and veteran trees and reflect air quality risk (as a minimum, avoid new emission sources within 50m of ancient woodland unless clearly demonstrated otherwise).

[4] https://designatedsites.naturalengland.org.uk/GreenInfrastructure/DesignGuide.aspx

- Avoid new roads, junctions, laybys or servicing areas located upslope or upwind of sensitive receptors where pollution deposition risk is increased.
- Site layout to prevent funnelling of polluted air towards sensitive receptors (e.g. avoiding canyon effects between built form and tree belts).

2. Ventilation and Indoor Air Quality (Pathway & Receptor)

- Implement a ventilation strategy that draws air from the cleanest parts of the site (e.g. rear elevations).
- Where exposure levels are high, the design should be reconsidered, as developments that rely on residents keeping windows closed would be unacceptable and inconsistent with good living conditions.
  Where no alternative design options exist, and for non-residential uses only, appropriate mitigation should be provided through mechanical ventilation with heat recovery (MVHR), with air intakes located on the cleanest façades
- Enhance airtightness on road-facing facades to reduce infiltration.
- Target indoor-air-quality credits such as BREEAM HEA 02 (or equivalent schemes).

3. Transport and Movement Design (Source & Pathway)

- Prevent or reduce vehicle penetration into larger sites, using Healthy Streets approach.
- Design for car-free or low-car developments where feasible.
- Provide facilities that support more efficient delivery practices and reduce re-delivery trips.
- Ensure appropriate electric-vehicle charging infrastructure and travel planning in line with relevant local guidance.
  - In Brighton and Hove:
    - Workplace sustainable travel plans
  - In East Sussex:
    - Planning applications – transport implications
  - In West Sussex
    - Guidance on Parking at New Developments (September 2020)
    - Travel plan resources
  - In Lewes and Eastbourne
  - Electric Vehicle Charging Points Technical Guidance Note
- Design developments to minimise vehicle trip generation, particularly HGV movements near sensitive receptors.
- Reroute construction and operational traffic away from sensitive receptors wherever practicable.

4. Adjacent Uses and Emission Points (Pathway & Receptor)

- Consider nearby land uses, such as the position of exhaust flues, when locating sensitive receptors.
- Ensure energy-system flues, extraction systems and vents discharge in a manner that avoids trapping pollutants near receptors.

5. Energy Systems and Combustion Sources (Source)

- Heating appliances must be installed in accordance with Approved Document L (2026)[5]
- Install ASHPs and GSHPs in accordance with the latest Institute of Acoustics and professional guidance to avoid noise-related complaints.[6]
- Backup generators (particularly diesel-fuelled units) should be avoided where cleaner alternatives are feasible. Where backup power is required, developments should:
    - prioritise cleaner alternatives such as natural-gas generators, solar-plus-battery systems, or fuel-cell technologies
    - where diesel cannot be avoided, use modern units fitted with diesel particulate filters (DPFs) and selective catalytic reduction (SCR) systems to substantially reduce emissions
    - ensure generators and exhaust points are located to minimise exposure to sensitive receptors

6. Odour and Cooking Emissions (Source & Pathway)

- For odorous uses—restaurants, takeaways, cafés, coffee roasteries—design extraction systems to minimise odour and smoke emissions.
- Ensure discharge points have appropriate height and efflux velocity.
- Use odour-abatement technologies such as carbon filters or electrostatic precipitators.
- All commercial kitchen systems must comply with EMAQ+'s *Control of Odour and Noise from Commercial Kitchen Exhaust Systems*.[7]

[5] https://www.gov.uk/government/publications/approved-document-l-2026

[6] https://www.cieh.org/media/7538/heat-pumps-briefing-note-professional-advice-note.pdf

[7] https://docs.planning.org.uk/20220503/61/RABEWWNYI2D00/rw0v1c5r0ferbjix.pdf

7. Synergies with Noise Design

- Many design measures benefit both air quality and noise. Designers should also review the *Planning Noise Advice Document: Sussex*[8] to ensure complementary solutions are incorporated.

[8] https://www.midsussex.gov.uk/media/3gvetbsi/pnads-final-v3-nov-2023.pdf

Appendix B – Good Design Checklist

Element	Measure	Check	Reason for non-compliance / Where secured in application
Layout	Sensitive uses to be set back, at least, 5m from main road or source of pollution (e.g. car parks), or	☐	
	habitable rooms orientated to be located away from the nearest source of pollution.	☐	
	Avoid creation or worsening of street canyons.	☐	
	Use angled or stepped façades to improve dispersion and airflow.	☐	
	Locate receptors away from clustered emission points	☐	
	Provide high-quality, permeable pedestrian and cycle connections to minimise reliance on private vehicles.	☐	
Ventilation & Indoor Air Quality	Ventilation strategy draws air from cleaner parts of the site (e.g., rear elevations).	☐	
	Cooking equipment, and kitchens to have appropriate purge ventilation.	☐	
	Enhanced airtightness on polluted or road facing façades, noting that sealed or non-openable windows are not acceptable for residential properties.	☐	
	Targeting BREEAM HEA 02 or equivalent IAQ certification.	☐	

Element	Measure	Check	Reason for non-compliance / Where secured in application
Transport	Development designed to reduce car dominance (e.g., “car-as-guest” layouts, Healthy Streets).	☐	
	Car-free or low-car development included where feasible.	☐	
	Electric Vehicle charge points to be installed in line with local guidance.	☐	
	Facilities provided to support smarter delivery practices (parcel lockers, managed delivery points).	☐	
Cycle Infrastructure	Appropriate secure, weatherproof and convenient to use cycle storage to be provided.	☐	
Welcome Pack	Comprehensive literature on public transport options (locations/timetables etc.) shall be provided to the purchasers of all new dwellings, and users of commercial spaces. Financial contribution to towards travel vouchers or cycle equipment for new residential travel plans should also be considered.	☐	
Energy Strategy	Low- or zero-emission heating systems prioritised (ASHP, GSHP; not biomass).	☐	
	ASHP/GSHP installation complies with Institute of Acoustics and professional guidance.	☐	
	Combustion-based systems designed for future transition to zero-emission technologies.	☐	
Solid Fuels	No solid fuel (wood or coal) domestic heating appliances or open fireplaces to be provided at any premises.	☐	

Element	Measure	Check	Reason for non-compliance / Where secured in application
Backup Generators	Diesel generators avoided where feasible; cleaner alternatives (gas, solar-battery, fuel cell) considered.	☐	
	If diesel required: generator fitted with DPF and SCR systems.	☐	
	Generator and exhaust positioned to minimise exposure to sensitive receptors.	☐	
Green Infrastructure	Green infrastructure used thoughtfully in line with best practice.	☐	
	Trees or bushes to be placed in between a main road and the building to aid dispersion and reduce pollutant concentrations at the façade.	☐	
Odour & Emission Points	Extraction/ventilation discharge points designed to release air at appropriate height and velocity.	☐	
	Odour abatement systems (e.g. carbon filters, electrostatic precipitators) installed where required and properly maintained to ensure ongoing effective performance.	☐	
	Commercial kitchen systems comply with EMAQ+ Odour and Noise Guidance.	☐	
Noise Synergies	Air-quality design aligned with the Planning Noise Advice Document: Sussex**.**	☐	

Appendix C – Emissions Assessment Calculator

STEP 1: Quantify change in emissions for NO_x and $PM_{2.5}$ (in tonnes per annum) for 5 years of scheme operation

The calculation must utilise the latest version of the Emissions Factor Toolkit (EFT)[9] to determine the transport-related emissions from the development proposal.

Primary inputs

- Area: **England (not London)**
- Year: **Year of first occupation (+ next 4 years). The tool must be run for each year.**
- Traffic format: **Basic Split**

Pollutants

- NOx and $PM_{2.5}$

Standard Outputs

- Annual Link Emissions

Input Traffic Parameters

- Road Type: **Urban Not London OR Rural**
- Traffic Flow: **Gross trip flow from the development** (unless otherwise advised by the Local Planning Authority)
- %HDV: **Percentage of Heavy-Duty Vehicles**
- Speed: **50 kph**
- No of Hours: **24**
- Link Length: **10km (NTS UK avg.)**

[9] https://laqm.defra.gov.uk/air-quality/air-quality-assessment/emissions-factors-toolkit/

STEP 2: Calculate damage costs for NO_X and $PM_{2.5}$ for 5 years of scheme operation

The calculation of the damage costs associated with the transport-related emissions from the development proposal must utilise the latest version of the Damage Cost Toolkit[10].

Control Panel

- Start Year: **year of first occupation**
- End Year: **5 years after first occupation**
- Price Base Year: **year of application submission**
- Number of pollutants: **2**

Damage cost User Interface

- Pollutant 1: **NOx**
- Pollutant 2: **PM2.5**
- Damage Cost Type: **Road Transport Urban (Big/Large/Medium/Small) OR Rural**

Enter the annual mean emissions for the specified pollutant and year, as calculated in the previous step. The Emission Factor Toolkit provides outputs in kilograms per year, so these values must be converted to tonnes per year. The final damage cost is then calculated by summing the *central present value* for both pollutants.

[10] Damage Cost toolkit https://www.gov.uk/government/publications/assess-the-impact-of-air-quality

Appendix D – Air Quality Validation Checklist

Development Proposal: .....

Pre-Planning Discussions: ☐

CLASSIFICATION

NOT Major	☐
Major	☐

Based on which trigger criteria?.....

GOOD DESIGN

Good Design incorporated	☐ Yes	☐ No

ASSESSMENT

Local Air Quality Scenario	☐ Yes	☐ No	☐ Not Applicable
Cumulative Impact considered	☐ Yes	☐ No	☐ Not Applicable
$PM_{2.5}$ Interim Guidance	☐ Yes	☐ No	☐ Not Applicable
Damage Cost	☐ Yes	☐ No	☐ Not Applicable
Calculation Details	☐ Yes	☐ No	☐ Not Applicable

MITIGATION

Evidence of minimising emissions	☐ Yes	☐ No	☐ Not Applicable
Minimising exposure/maximising dispersion	☐ Yes	☐ No	☐ Not Applicable
Compliance with policy	☐ Yes	☐ No	☐ Not Applicable

Compliance with limits	☐ Yes	☐ No	☐ Not Applicable
Compliance Damage Cost calculation	☐ Yes	☐ No	☐ Not Applicable
Mitigation Measures listed and costed	☐ Yes	☐ No	☐ Not Applicable
Construction Environmental Management Plan	☐ Yes	☐ No	☐ Not Applicable

Signature:..... Print: .....

Position Held: ..... Date: .....