

SOLIHULL CLEAN AIR STRATEGY

2019 - 2024



SOLIHULL CLEAN AIR STRATEGY 2019 – 2024

FOREWORD

We are pleased to introduce Solihull's first Clean Air Strategy. This sets out our clear commitment to improving air quality and the specific actions that we will take to achieve our ambition for cleaner air across our borough.

Air pollution is the top environmental risk to human health in the UK, and the fourth greatest threat to public health after cancer, heart disease and obesity. Whilst our latest assessment of air quality shows that Solihull is within the national air quality objectives, and therefore not required to develop a Local Air Quality Action Plan, we recognise that improvements in air quality will benefit the health and economy of Solihull, which is also acknowledged within the current Council Plan.

We are keen to ensure that there is a process in place to continually improve air quality across the borough, hence the development of this Strategy.

Air quality is a cross cutting theme which has implications for health, the environment and transport. This Clean Air Strategy sets out the case for action and outlines the measures that will be taken over the next five years within Solihull in order to improve air quality and reduce population exposure to the pollutants recognised as being the most harmful to human health.

Whilst this strategy is a Council document, we recognise that tackling air quality means working with our residents and stakeholders in a different way, and consequently our areas of focus are likely to evolve over time. In light of this, delivery against the action plans will be formally reviewed every year, within the local, regional and national context.

This strategy articulates a clear and compelling vision, with tangible evidence based actions. We believe that this strategy is fundamental to protecting and improving air quality across the borough.



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Chair of Solihull's Air Quality
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Section I

INTRODUCTION

1.1 What is air pollution?

Everyone is exposed to air pollution to some extent. Air pollutants are generated by a mixture of natural and man-made processes and are released into the air, where they can travel long distances and combine with each other to create different pollutants. Pollutants from other parts of the UK, and elsewhere in the world, as well as local sources can build up into high local concentrations of pollution in an area.

External air pollution

Road traffic emissions are the key source of local air pollutants in Solihull. Locations with high traffic volumes and congestion are subject to the greatest amount of air pollution. As a consequence, those who live near these roads are at increased risk of ill health and early death. Congestion results in higher pollutant emissions, as emissions from vehicles are high when travelling at intermittent speeds. The dispersion of air pollution is another factor in determining areas of poor air quality; in narrow high-sided streets the dispersal of pollution can be limited resulting in high pollutant concentrations.

The rail network is also responsible for air pollution, particularly from stationary diesel trains within enclosed railway stations. The ambitious target within the National Clean Air Strategy 2019 of removing all diesel only trains by 2040 will significantly improve air quality at railway stations.

Vehicles are sometimes regarded as the sole cause of pollution however there are many other sources of harmful emissions including biomass, domestic wood burning, agriculture and industry. Cleaner technologies and simple changes in individual behaviour will therefore contribute to improved air quality for everyone.

Internal air pollution

People spend up to 90% of their lives indoors and 60% of that time at home. Children and people with respiratory conditions are particularly susceptible to health problems caused by poor indoor air quality. Outdoor pollutants enter through windows or gaps in the building structure and are a significant contributor to indoor air quality. There are a number of sources of indoor air pollutants that can harm health including:

- Carbon monoxide, nitrogen dioxide and particulates from domestic appliances (boilers, heaters, fires, stoves and ovens), which burn carbon containing fuels (coal, coke, gas, kerosene and wood).
- Volatile Organic Compounds from cleaning and personal care products, building materials and household consumer products (paints, carpets, laminate furniture, cleaning products, air fresheners, polish).
- environmental tobacco smoke and second hand smoke.

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1.2 Types of pollution

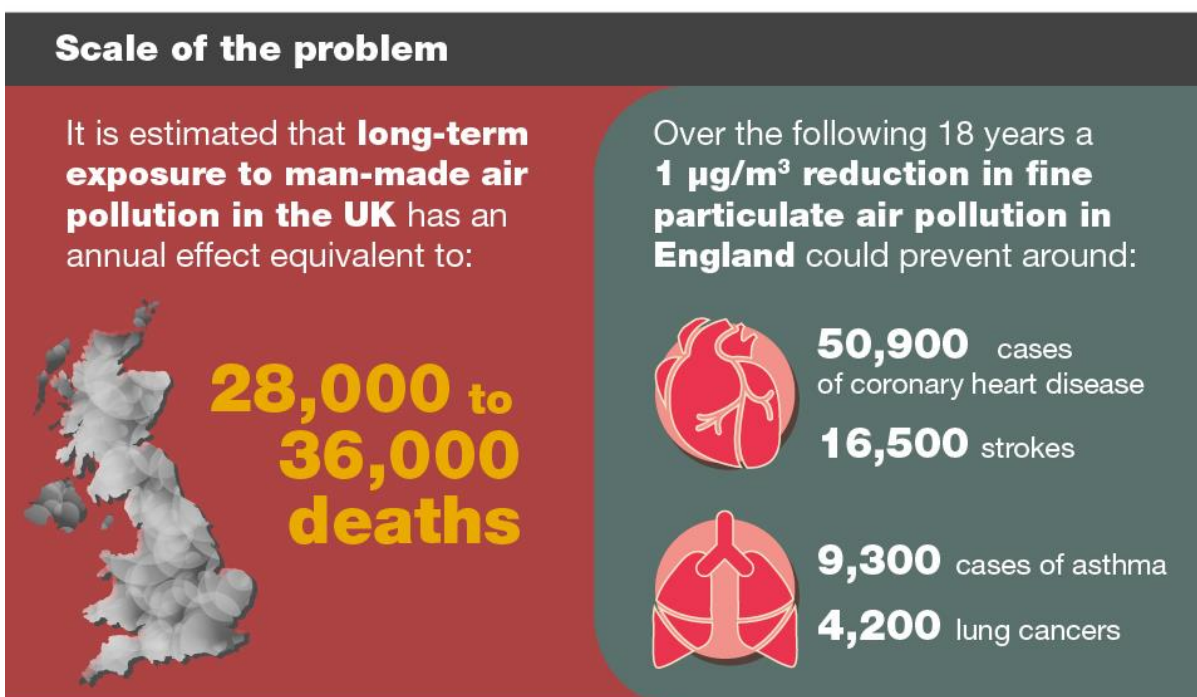
There are many pollutants that can impact on health; the major air pollutants in the UK are:

- particulate matter (PM)
- nitrogen dioxide (NO₂)
- ammonia (NH₃)
- sulphur dioxide (SO₂)
- non-methane volatile organic compounds (NMVOCs)
- ozone (O₃)

Of these, the main pollutants of concern in the UK are particulate matter, nitrogen dioxide, and ozone. Unlike the other primary pollutants listed above, ozone cannot be managed locally, and its formation is often as a result of emissions from other countries. As ozone can only be successfully tackled by national and international action it is not included within this strategy.

This strategy will therefore focus on actions to reduce the primary air pollutants particulate matter (PM) and nitrogen dioxide (NO₂) which are both major components of urban air pollution. Currently, there is no clear evidence of a safe level of exposure below which there is no risk of adverse health effects; indeed only a small fraction of deaths are due to exceedances of air quality standards.

Even slight reductions of PM or NO₂ concentrations below air quality standards are likely to bring additional health benefits, as demonstrated by the figure below (PHE, 2018).



Air quality measurements are typically reported in terms of daily or annual mean concentrations of particles per cubic meter of air volume (m³).

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Particulate Matter (PM)

PM is a generic term used to describe a complex mixture of solid and liquid particles of varying size, shape, and composition. The major components of PM are sulphate, nitrates, ammonia, sodium chloride, black carbon, mineral dust and water. Some particles are emitted directly (primary PM); others are formed in the atmosphere through chemical reactions (secondary PM). The composition of PM varies greatly and depends on many factors, such as geographical location, emission sources and weather.

Most PM emissions are caused by road traffic, with exhaust emissions, tyre and brake wear and dust from road surfaces being the main sources. While electric vehicles do not emit NO₂ they are still responsible for PM emissions from the wear on brake discs and tyres. Construction sites, with high volumes of dust and emissions from machinery are also major sources of local PM pollution, along with accidental fires and burning of waste and vegetation.

PM is often classified according to its size and referred to as:

- coarse particles (PM₁₀; particles that are less than 10 microns (µm) in diameter)
- fine particles (PM_{2.5}; particles that are less than 2.5 µm in diameter)
- ultrafine particles (PM_{0.1}; particles that are less than 0.1 µm in diameter)

The size of particles and the duration of exposure are key determinants of potential adverse health effects. Particles larger than 10 µm are mainly deposited in the nose or throat, whereas particles smaller than 10 µm pose the greatest risk because they can be drawn deeper into the lung. The strongest evidence for effects on health is associated with fine particles (PM_{2.5}).

Nitrogen Dioxide (NO₂)

NO₂ is a gas that is produced along with nitric oxide (NO) by combustion processes. Together with nitrous oxide (N₂O), they are often referred to as oxides of nitrogen (NO_x).

NO₂ is primarily a secondary pollutant produced by the oxidation of NO by ground level ozone. Nitric oxide is produced by the reaction of nitrogen and oxygen in the combustion process.

It is estimated that 80% of NO_x emissions in areas where the UK is exceeding NO₂ limits are due to transport, with the largest source being emissions from diesel light duty vehicles (cars and vans). The major source of NO₂ in Solihull is vehicle emissions from exhausts in urban areas. Other sources include power generation, industrial processes, and domestic heating.

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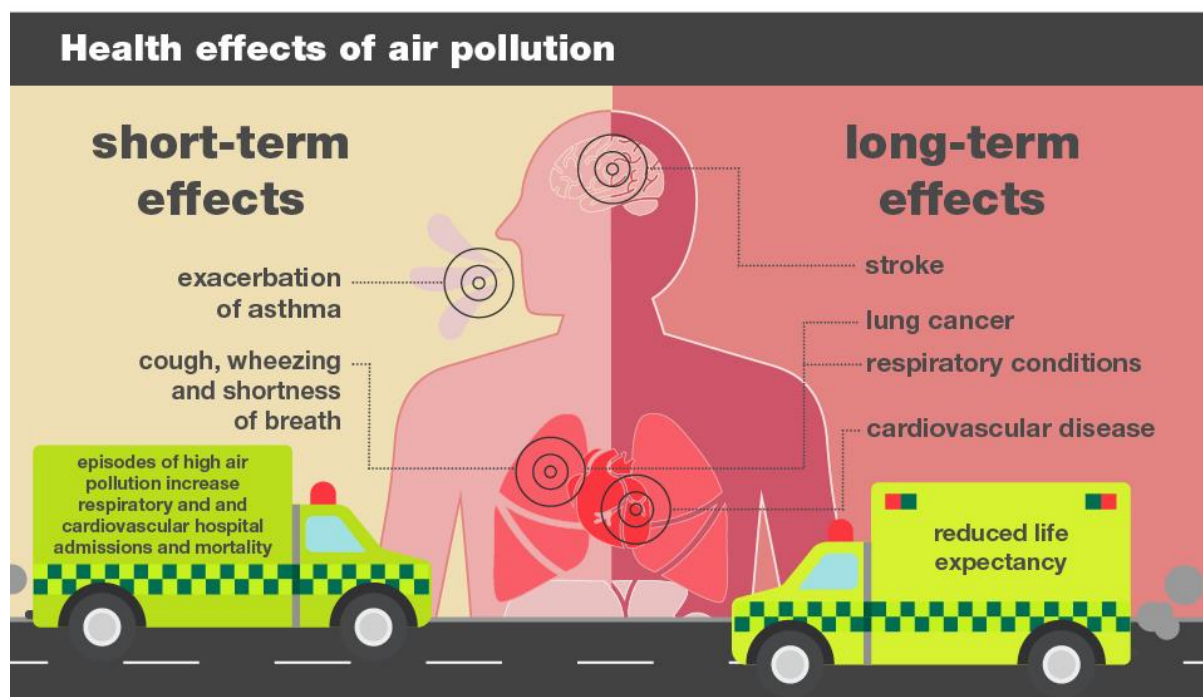
Section 2

IMPACT ON HEALTH

Poor air quality is recognised as a significant public health issue, disproportionately affecting those who live in more deprived and congested areas, and those who are more vulnerable to the effects such as children, older people, and those with existing medical conditions.

When air pollutants enter the body, they can have effects on various organs increasing the risk of some cancers and cardiovascular disease, and potentially exacerbating existing conditions, such as respiratory disorders. Recent research has concluded that children's lung development can be permanently stunted by as much as 5% from diesel air pollution. Emerging evidence suggests that air pollution may be linked to dementia and cognitive decline, as well as early life effects such as low birth weight.

The known health effects of air pollution are summarised in the figure below (PHE, 2018).



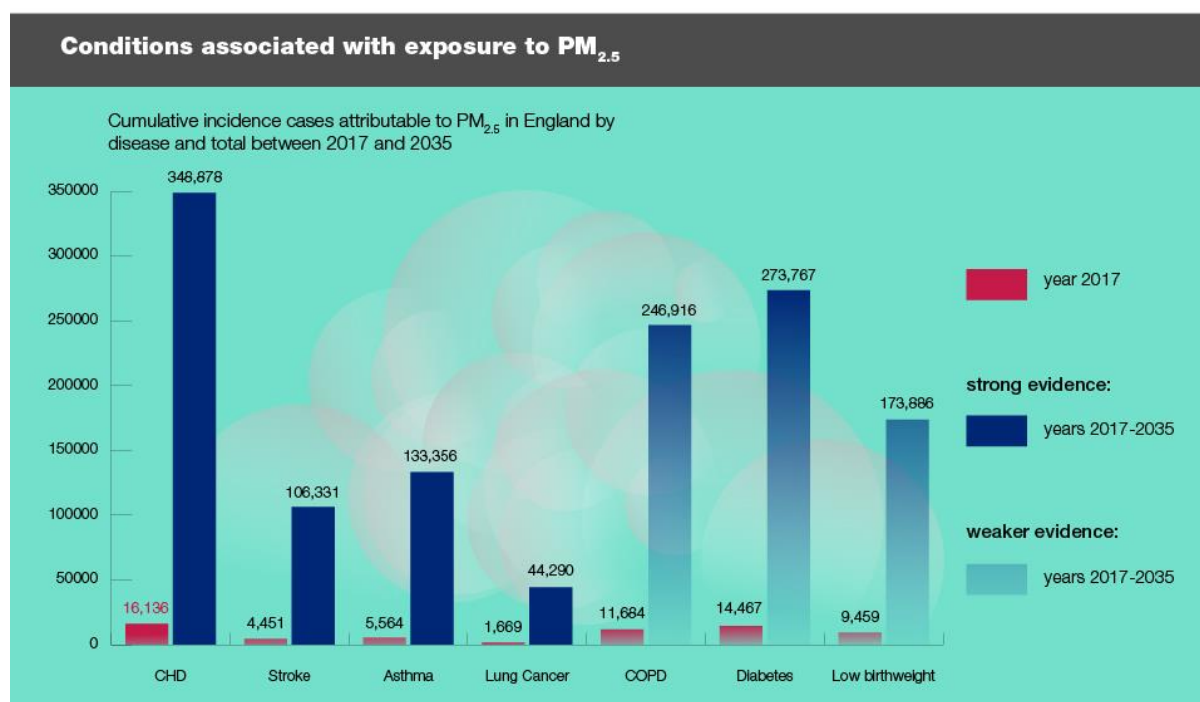
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Health Impacts of Particulate Matter (PM)

Of particular concern to health is particulate matter. Particles with a diameter of 10 microns or less, ($\leq PM_{10}$) can penetrate and lodge deep inside the lungs, however, the even more health-damaging particles are those with a diameter of 2.5 microns or less, ($\leq PM_{2.5}$).

$PM_{2.5}$ can penetrate the lung barrier and enter the blood system. Chronic exposure to particles contributes to the risk of developing cardiovascular and respiratory diseases, as well as of lung cancer.

The figure below (PHE, 2018) shows the health conditions associated with exposure to $PM_{2.5}$. The number of cases shown is the national picture, and is shown here simply as an indication of potential conditions in Solihull.



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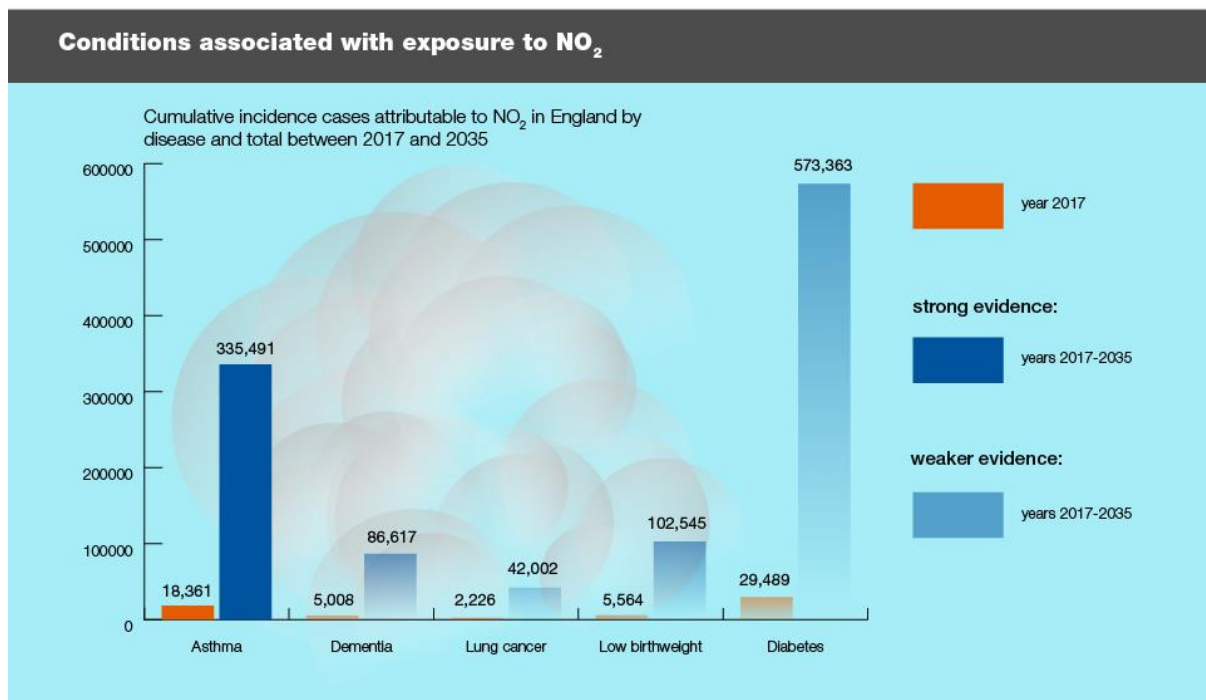
Health Impacts of Nitrogen Dioxide (NO₂)

Nitrogen dioxide (NO₂) can irritate the lungs and lower resistance to respiratory infections such as influenza. Continued or frequent exposure to high concentrations may cause an increased incidence of acute respiratory illness in children.

Short-term exposure to NO₂, particularly at high concentrations, is a respiratory irritant that can cause inflammation of the airways leading to coughing, production of mucus and shortness of breath.

At high concentrations NO₂ causes inflammation of the airways and long-term exposure can affect lung function and respiratory symptoms, including asthma. Studies have shown associations of NO₂ in outdoor air with reduced lung development, and respiratory infections in early childhood and effects on lung function in adulthood. The World Health Organisation (WHO) and the Department for Environment, Food and Rural Affairs (DEFRA) guideline values of 40 µg/m³ (annual mean), were set to protect the public from the health effects of NO₂.

The figure below (PHE, 2018), shows the health conditions associated with exposure to NO₂. The number of cases shown is the national picture, and is shown here simply as an indication of potential conditions in Solihull.



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SECTION 3

THE WIDER CONTEXT AND WORKING WITH OUR STAKEHOLDERS

This Clean Air Strategy focuses on actions led by Solihull Council to improve air quality across the borough, however in order to be truly effective, the action plans will be reliant on an integrated approach which encompasses behavioural, strategic and infrastructure changes, working alongside a range of partners. Air quality will also be influenced by the wider national and regional strategic context. These interdependencies are summarised below.

The **National Clean Air Strategy 2019** outlines proposals to tackle all sources of air pollution, “making our air healthier to breathe, protecting nature and boosting the economy”. It complements three other UK government strategies: the Industrial Strategy, the Clean Growth Strategy and the 25 Year Environment Plan.

The **Supplement to the UK Plan for tackling roadside nitrogen dioxide concentrations** was published in October 2018 following the requirement for DEFRA to create a supplement to the 2017 UK plan for tackling roadside NO₂ concentrations. In March 2018 the government legally directed 33 local authorities, including Solihull, to develop a feasibility study to identify if there were any measures that could bring forward compliance on those roads modelled to have concentrations of NO₂ in exceedance of the limits set out in the Ambient Air Quality Directive. Solihull’s proposed package of measures to bring forward compliance and improve air quality on the two affected sections of the A45 has been accepted by DEFRA. The proposal includes enhanced workplace travel plans, use of cycling and walking networks, car sharing schemes and fleet efficiency advice.

Solihull Council is a member of the **West Midlands Combined Authority (WMCA)**. The WMCA have a key role in co-ordinating the actions of individual authorities and mitigating any negative effects that the Birmingham mandatory Clean Air Zone might have on adjoining local authorities, as well as leading on the development of a strategic approach to air quality covering the whole area and building on the emerging industrial strategy and existing transport delivery plan. A West Midlands Low Emissions Strategy and Action Plan are currently being developed detailing joint action between local authorities, the WMCA and other stakeholders where this will accelerate existing agreed local plans to tackle air quality and greenhouse gas emissions.

Transport for West Midlands (TfWM) is the public body responsible for coordinating transport services in the West Midlands and is an executive body of the WMCA. Plans are in place for TfWM to provide strategic transport links which will contribute to improving air quality in Solihull. These include a rapid transit ‘sprint’ bus from Solihull town centre to Birmingham International Station, and ultimately the High Speed Two (HS2) Interchange Station, as well as a Metro tram route from Birmingham City Centre through East Birmingham and Solihull to Birmingham Business Park, Birmingham Airport, Birmingham International Station, the National Exhibition Centre (NEC) and HS2 Interchange site.

The arrival of the **HS2** Interchange station within the borough of Solihull, the first station outside London, will see the provision of an Automated People Mover (APM) connecting the Interchange station with the NEC, Birmingham International Station and Birmingham Airport to ensure ease of access to the new station without an overreliance on private vehicles.

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Air quality is included within the **Birmingham & Solihull Sustainability & Transformation Plan (STP)** strategy. Five per cent of all the traffic on the road in England is related to the National Health Service (NHS). The Birmingham & Solihull STP in recognition of the impact of air pollution from this traffic have agreed a number of actions to reduce emissions which include championing the development of Green Travel Districts, operating 'green fleets' across organisations, initiating a 'no idling' policy for vehicles outside all NHS premises within the area and removing unnecessary physical journeys by using digital technologies such as virtual consultations where possible.

Birmingham Airport is situated within the borough of Solihull and a number of elements of airport operation cause air pollutant emissions. The airport currently works with airlines and air traffic control on green airfield initiatives, such as reduced engine taxiing and limiting the holding of aircraft where possible. Where practical the airport reduces the use of Auxiliary Power Units and Ground Power Units by aircraft, by providing Fixed Electrical Ground Power on aircraft stands. Solihull Council is a member of the Airport Health Group which aims to embed the consideration of community health issues and opportunities into the operation and any further development of Birmingham Airport, and to monitor the effectiveness of mitigation and community support initiatives.

Solihull Council is a partner in the **WM-Air Project**, led by Birmingham University and funded by the Natural Environment Research Council (NERC) as part of their Regional Impact of Science of the Environment (RISE) scheme. The NERC RISE scheme supports the application of existing environmental science expertise to deliver regional impact - in societal, economic and policy terms. WM-Air was co-designed in collaboration with over 20 partners ranging from the Combined Authority and Local Authorities to private sector companies and industry bodies, with a geographical focus upon the WMCA region. The NERC funding will support staff, measurements, modelling activities and the development of predictive tools to enhance air quality policy and prediction, and will resource a cohort of Impact Fellows, to apply capability developed by the project to specific case studies. The project runs for a five-year period from late 2018.

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Section 4

MONITORING OF POLLUTANTS IN SOLIHULL

The UK sets air quality goals, informed by evidence from a range of sources. These include the World Health Organisation (WHO) guidelines, which are recognised as the international benchmark for setting air quality standards and are based on epidemiological, laboratory and toxicology studies. They are intended to minimise the public health impact of air pollution while still being economically achievable.

Local authorities have a duty under Part IV of the Environment Act 1995 to review and assess air quality in their areas and where air quality is poor (where there is, or is likely to be, non-compliance with objectives and there is relevant public exposure) they have a duty to declare an Air Quality Management Area (AQMA) and formulate and adopt an action plan which outlines remedial measures to address the problem.

Solihull Council do not have an air quality monitoring (AQM) station however, since July 2017, diffusion tubes have been used across a number of sites to measure Nitrogen Dioxide levels within the borough. This has provided robust baseline data from which to determine areas of the borough where more targeted action may be needed to reduce levels of pollution, and has been pivotal in determining the actions within this Solihull Clean Air Strategy.

Diffusion tubes are a cost effective and easy way to measure Nitrogen Dioxide and are often used by local authorities to gauge air pollution levels across a range of locations. Diffusion tubes are small plastic tubes, within which is a steel mesh disc coated with triethanolamine (TEA), which absorbs nitrogen dioxide. When gases pass over this mesh the TEA changes and it is this chemical change that provides data on how much nitrogen dioxide was in the air during the monitoring period.

None of the diffusion tube sites within Solihull exceeded the annual mean NO₂ limit value of 40µg/m³ in 2017/18 once the DEFRA guidance had been applied. A summary of the NO₂ air quality monitoring data that has been collected as part of Solihull's air quality monitoring programme can be found here:

<http://www.solihull.gov.uk/Resident/Pests-pollution-food-hygiene/Air-quality-monitoring-in-Solihull>

Whilst the Solihull monitoring data does not warrant declaring any part of the borough as an Air Quality Management Area, there is recognition that measures could still be taken to reduce pollution levels across the borough; hence the development of a wide range of evidence based actions within this strategy.

Whilst the current diffusion tube monitoring provides valuable baseline NO₂ data for Solihull, future monitoring will also include particulate matter (PM₁₀ and PM_{2.5}) as PM_{2.5} has the highest epidemiological link to health outcomes. A comprehensive monitoring regime will be introduced in 2019.

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Section 5

ACTION PLANS TO IMPROVE AIR QUALITY ACROSS SOLIHULL

Since air pollution cannot be contained within geographical boundaries, securing the necessary improvements will require action across all parts of society, with some solutions lying outside traditional air quality management regimes.

The themes identified for action within this strategy are those deemed to have the greatest impact on improving air quality within Solihull. The themes are: Education; Transport; Planning; Environment; Public Messaging & Procurement.

Action plans for each of the six themes were developed following consultation workshops to which all Solihull elected members were invited to attend to discuss and shape the actions with policy leads for the themes.

Each theme is presented in the following section with a summary of existing actions already being taken which will have an impact on reducing air pollution, followed by proposed actions for the next five years. These actions are identified as short, medium and long term actions.

Delivery against the action plans will be overseen by the Cabinet Member for Environment & Housing with support from the air quality steering group and formally reviewed every year within the local, regional and national context. An annual progress report will be discussed at the Economic Development & Managed Growth Scrutiny Board prior to presentation to the relevant Cabinet Members. The action plans will subsequently be revised and updated as appropriate.

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THEME I

EDUCATION

Many schools across the borough experience a number of traffic related issues at the beginning and end of each school day, with pollution from the school run having a serious impact on young people's health. Figures from the Department of Transport show that that one in four cars on the road at peak times are on the school run. Research by Living Streets indicates that 42% of parents in the UK are concerned about levels of air pollution around their child's school, as there is an increasing recognition that children are particularly vulnerable as they absorb and retain pollutants in the body for longer. Working with the whole school community is therefore a priority to reduce air pollution within the borough. This will include education and behaviour change interventions for both pupils and parents. Encouraging primary school children to want to be sustainable travellers can contribute to whole families changing their travel habits, whilst investing time with children transitioning to secondary school, can influence a child's travel habits as they become more independent.

EXISTING ACTIONS BEING TAKEN TO IMPROVE AIR QUALITY – EDUCATION

Introduced School Streets to reduce congestion around three primary schools by limiting traffic in the streets surrounding schools at key times, creating a predominantly car free zone.

Extensive programme of training and lessons in schools and colleges including WalkSmart child pedestrian training, Scootability, Balancability, Learn to Ride, Bikeability Levels 1, 2, and 3, Air Pollution Lessons, the Junior Travel Ambassador programme and Year 6/7 Transition.

Support for schools to achieve ModeShift STARS accreditation - a national schools awards scheme to recognise schools that have demonstrated excellence in supporting cycling, walking and other forms of sustainable travel.

Secondary school programme designed to change behaviour - delivery includes Transition Support, Bikeability level 2/3, GCSE PE Cycling, Frame Academy.

Adult training includes learn to ride, confidence building and on road training at level 3 as well as Bike Fix, Parents and Cycle Promotion.

A community cycling offer in North Solihull that focuses on engaging with inactive residents including adults and children.

Independent Travel Training Team working with students with Special Education Needs to equip them with the skills and confidence to travel independently using public transport, thereby reducing the need for school transport provision.

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EDUCATION ACTION PLAN	TIMEFRAME
Support all primary schools within the borough to carry out diffusion tube monitoring in their playgrounds, twinned with an educational programme.	SHORT TERM: WITHIN 1 YEAR MEDIUM TERM: WITHIN 2 – 3 YEARS LONG TERM: WITHIN 3 – 5 YEARS
'On the Move' - A behaviour change programme working with children transitioning to secondary school to use greener forms of transport on their new school journeys.	SHORT TERM
Recognise the efforts schools make to address air quality through the Greener Solihull Schools Award. Encourage schools to use 'Air Quality' as part of their challenge section.	SHORT TERM
Extend pilot sessions of a Year 4 Air Quality awareness lesson & look into developing an educational package, resources for teachers and on line resources.	SHORT TERM
School Streets Car Exclusions – Continue scheme at existing three schools and explore expansion of the scheme to other interested suitable schools.	SHORT/MEDIUM TERM
ModeShift STARS – To work with all schools to get them engaged and signed up to this national sustainable travel award, promoting and bringing together all sustainable travel initiatives delivered in schools.	MEDIUM TERM
Consider anti-idling policies outside primary schools.	MEDIUM TERM

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THEME 2

TRANSPORT

Road traffic emissions are the key source of local air pollutants in Solihull. Locations with high traffic volumes and congestion are subject to the greatest amount of air pollution. Congestion results in higher pollutant emissions, as emissions from vehicles are high when travelling at intermittent speeds.

A Business Support Team is currently being established within the local authority who will work closely with businesses in the borough offering a package of support and guidance to encourage businesses to promote sustainable travel, agile working and to reduce their carbon footprint through effective travel planning.

EXISTING ACTIONS BEING TAKEN TO IMPROVE AIR QUALITY – TRANSPORT
Highway Services department of Solihull Council introduced an electric vehicle scheme for staff to use on council business.
Electric Charging points installed in main Solihull town centre car parks.
Leading on the E car club demonstrator project in North Solihull.
Working with businesses to promote more use of active and sustainable modes of travel.
Solihull Advanced Quality Partnership Scheme (AQPS) came into operation November 2017 with local bus service operators and transport for West Midlands. This new AQPS implemented under the Bus Services Act 2017 and includes Euro VI emission standards by January 2021.

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TRANSPORT ACTION PLAN	TIMEFRAME
	SHORT TERM: WITHIN 1 YEAR MEDIUM TERM: WITHIN 2 – 3 YEARS LONG TERM: WITHIN 3 – 5 YEARS
Work with partners to promote more electric charging points at workplaces and car parks.	SHORT TERM
Support businesses in the borough to develop travel plans which include car sharing schemes and modal shift initiatives – including agile working practices.	SHORT TERM
Consider traffic flows when replacing roundabouts/islands with traffic lights to avoid vehicles sitting stationary for long periods.	SHORT TERM
Work with partners to promote use of electric bikes.	MEDIUM TERM
Deliver Next bike hire scheme in conjunction with the Combined Authority.	MEDIUM TERM
Provide and promote a choice of cycle routes, including routes that avoid highly polluted roads (Wildlife Ways).	MEDIUM TERM
Negotiate to turn bus shelters with open fronts facing very busy roads around so they are facing the pavement instead.	MEDIUM TERM
Promote electric taxis and buses.	LONG TERM

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THEME 3

PLANNING

The built environment can affect the emission of road-traffic-related air pollutants by influencing how, and how frequently, people travel, for example by ensuring good connections to walking and cycling networks. Buildings can affect the way air pollutants are dispersed through street design and the resulting impact on air flow.

The imminent HS2 construction work across the country will result in increased emissions from non-road technologies which will need to be carefully managed. Haul routes should be considered to keep transport away from local residents as large scale construction exercises have the potential to significantly increase pollution for the duration of the construction.

Addressing air pollution at the planning stage may reduce the need for more expensive remedial action at a later stage and can help to maintain people's health and wellbeing. An assessment of the extent to which proposals minimise and mitigate road-traffic-related air pollution in planning applications for major developments will meet the priorities identified in the Local Plan and other key strategies.

EXISTING ACTIONS BEING TAKEN TO IMPROVE AIR QUALITY – PLANNING
Policy PI4 in the Solihull Local Plan 2013.
Incorporated in Environmental Impact Assessments.
Part of Health Impact Assessments.
Draft Health Supplementary Planning Document.

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PLANNING & DEVELOPMENT ACTION PLAN	TIMEFRAME SHORT TERM: WITHIN 1 YEAR MEDIUM TERM: WITHIN 2 – 3 YEARS LONG TERM: WITHIN 3 – 5 YEARS
<p>Update the relevant policies in the Local Plan Review to reflect and deliver the Solihull Clean Air Strategy.</p>	<p>SHORT TERM/MEDIUM TERM</p>
<p>Produce guidance within forthcoming Health Supplementary Planning Document (SPD) to shape the design and location of new development. The guidance will seek to minimise or mitigate adverse impacts on air quality, as well as enabling improvements to air quality, where appropriate.</p>	<p>SHORT TERM/MEDIUM TERM</p>
<p>Ensure new developments are not car dependent.</p>	<p>MEDIUM TERM/LONG TERM</p>
<p>Optimise and support proposals for sustainable travel options.</p>	<p>MEDIUM TERM/LONG TERM</p>
<p>Avoid locating sensitive developments (e.g. schools & care homes) in areas subject to poor air quality.</p>	<p>MEDIUM TERM/LONG TERM</p>
<p>Increase green infrastructure (both in the public and private realm) in order to offset the effects of poor air quality.</p>	<p>MEDIUM TERM/LONG TERM</p>

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THEME 4

ENVIRONMENT

Natural Environment

Air pollution has a direct impact on the environment; clean air is central to both human health and a thriving natural environment. Clean, green and healthy environments in urban and rural areas are an essential component of progress, and an aid to economic development. Over time, emissions of air pollutants have had negative impacts in plant and animal communities in many habitats, while installation of green infrastructure (e.g. green walls, living walls, hedges) can reduce pollutant concentrations in street canyons.

Climate change and the need to reduce the greenhouse gases have led to policies and the move to renewable heating technology like biomass boilers. Biomass burning can support decarbonisation although without appropriate abatement it can increase levels of air pollution, unless it involves a switch away from dirtier fuels.

Indoor Pollution

Many of the activities that contribute to air pollution take place in or around the home. The principal forms of indoor air pollution are particulate matter (PM) and Non-Methane Volatile Organic Compounds (NMVOCs). PM is produced by many forms of cooking and home heating, most notably from combustion in open fires and stoves. NMVOCs are emitted by a wide variety of chemicals that are found in carpets, upholstery, paint, cleaning, fragrance, and personal care products. Sulphur dioxide (SO₂) is emitted by coal burned in open fires.

EXISTING ACTIONS BEING TAKEN TO IMPROVE AIR QUALITY - ENVIRONMENT
Working with key stakeholders to identify opportunities for district energy networks, supporting the Council's long term ambitions to move forward with low carbon economic growth.
Building Control Regulations in relation to new chimneys, flues and appliances.
Issuing of permits and inspecting processes that may cause air pollution.
Advice provided on the Council's website in relation to bonfires (includes Code of Practice).
Awareness of Smoke Control Areas.
Assessing whether air quality impacts are significant on new installations such as biomass boilers and ensuring appropriate mitigation measures to address air quality concerns.

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ENVIRONMENT ACTION PLAN	TIMEFRAME
Assess and better understand the impact of air pollution on our natural environment/biodiversity and the role of the local authority in reducing harmful impacts.	SHORT TERM SHORT TERM: WITHIN 1 YEAR MEDIUM TERM: WITHIN 2 – 3 YEARS LONG TERM: WITHIN 3 – 5 YEARS
Explore the opportunities for mitigating climate change locally.	SHORT TERM
Raise awareness of the impacts of indoor air pollution to enable residents to make informed choices to protect themselves, their families and their neighbours.	SHORT TERM
Explore options for Particulate Pollution Capture by the appropriate installation of green infrastructure (e.g. green walls, living walls, hedges).	MEDIUM TERM
Where possible plant trees in areas of pollution ‘hotspots’ such as traffic junctions and traffic lights to yield greater rates of pollutant removal (aligns with the Forestry Strategy).	MEDIUM TERM
Explore low emission neighbourhood e-cargo bike trials.	MEDIUM TERM

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THEME 5

PUBLIC MESSAGING

Communication with the public in a timely and effective manner is essential to ensuring delivery of the aspirations outlined within this strategy.

It is recognised that there are large numbers of people who do not, or cannot routinely access online resources and alternative, more appropriate sources of communication will be explored and utilised. These will be outlined in the communications strategy underpinning the Clean Air Strategy.

EXISTING ACTIONS BEING TAKEN TO IMPROVE AIR QUALITY - PUBLIC MESSAGING
Air quality webpage with advice to the public on how to personally lower emissions and reduce exposure.
Clean Air Day Campaign – to encourage people to change behaviours to reduce air pollution.
Active Travel Survey for Council staff about activity levels, case studies with features in staff newsletter.
Communications to Council staff regarding sustainable travel – cheaper travel passes, cycle to work scheme.
'Walk Solihull' publicity and coverage.
Wildlife Ways – key message in this project is about walking and cycling across the Borough, opening up the Borough with green corridors for people and nature.
Bikeability – support for bike training in schools – video production and articles in both residents and staff communications.
InclusivEV – electric car pilot in north of the borough.
Green Great Britain Week – work with Sustainable Travel Team to promote cycling to staff and pledges to travel to work in a greener way.

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PUBLIC MESSAGING ACTION PLAN	TIMEFRAME
Communicate what the Council is doing/will be doing to tackle air pollution through a variety of mediums.	SHORT TERM SHORT TERM: WITHIN 1 YEAR MEDIUM TERM: WITHIN 2 – 3 YEARS LONG TERM: WITHIN 3 – 5 YEARS
Roll out public awareness initiatives such as car-free days beyond national Clean Air Day to raise awareness of air pollution throughout the year.	SHORT TERM
Promote a greater understanding of the relationship between indoor air pollution and health, with a focus on wood burners in the winter months.	SHORT TERM
Promote agile working for Council staff with an emphasis on the benefits to reducing impact on and exposure to air pollution.	SHORT TERM
Air quality messaging system to inform those who are vulnerable to air pollution about the air quality forecast.	MEDIUM TERM
Communicate long term actions/policies from the Clean Air Strategy including successful interventions.	MEDIUM TERM
Promote an annual active travel day for Council staff and Councillors.	MEDIUM TERM

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THEME 6

PROCUREMENT

The public sector fleet is substantial and includes various vehicle types, some of which are highly polluting. Reducing emissions from public sector vehicle fleets will help to reduce road traffic related air pollution. Approaches could include replacing vehicles with low-emission vehicles over time, training drivers to change their driving style, and consolidating and sharing vehicles to ensure efficient use. There is an opportunity for Solihull Council to ensure that the services we commission identify how they will reduce emissions from their vehicle fleets to address air pollution.

The role of procurement will be to support the other service areas in the procurement of their identified options during delivery of this strategy. Any actions to improve air quality will need to be assessed against the cost and quality implications to any goods/services to ensure that the measures taken forward represent value for money.

EXISTING ACTIONS BEING TAKEN TO IMPROVE AIR QUALITY – PROCUREMENT
Social Value Policy is in place.
Look at environmental infringements in the evaluation process.
Where appropriate tenders are evaluated on Social Value.
Support service areas to become more efficient e.g. Building Maintenance and Mechanical and Electrical contract– vehicle proximity software that considers urgency, vehicle availability and stock on the vehicle to minimise the distance travelled by the fleet.
Recently tendered for two electric vehicles for the Council House.
Engage with Small & Medium Enterprises (SMEs) in order to make tenders more accessible to them.

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PROCUREMENT ACTION PLAN	TIMEFRAME
<p>Incorporate new policies to be embedded into our terms and conditions.</p>	<p>SHORT TERM</p>
<p>Include vehicle emissions and delivery schedules as a prompt for services areas when developing specifications.</p>	<p>SHORT TERM</p>
<p>Develop a social value monitoring system and seek funding from the WMCA to develop this.</p>	<p>MEDIUM TERM</p>
<p>Support Council services in developing their tender specifications in line with the Clean Air Strategy.</p>	<p>MEDIUM TERM</p>
<p>Support facilities management in developing the new transport strategy with a view to becoming carbon neutral.</p>	<p>LONG TERM</p>

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Section 6

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